THE CANADIAN HOSPITAL

OFFICIAL JOURNAL
CANADIAN HOSPITAL COUNCIL

FEBRUARY, 1952

Contents

Vol. 29 **February, 1952** No. 2

(For Subscription Rates see page 132)

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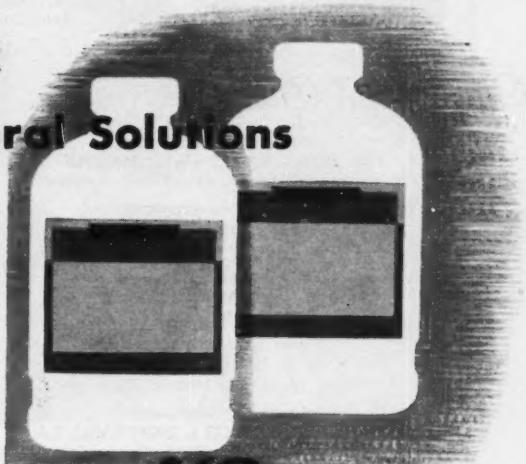

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A Restaurant Chain says:

"We keep a running record of our refrigeration maintenance and are very satisfied with our Frigidaire equipment"—Murray's Restaurants Limited.

A Florist says:

"Frigidaire's constant temperatures and correct humidity conditions keep our flowers at full freshness longer . . . and our saving in refrigeration expense is very considerable." Adams Flowers Co., Limited, Toronto, Ont.

A Locker Plant says:

"Refrigeration is the heart of a frozen food plant . . . our Frigidaire refrigeration gives excellent, trouble-free performance . . . operates efficiently and economically." Hanna's Frozen Foods, Calgary, Alta.

A Telephone Company says:

"Our Frigidaire Air Conditioning System gives our operators perfect working conditions . . . protects thousands of dollars worth of delicate machines and switchboards . . . is satisfactory in every respect."— New Brunswick Telephone Co., Moncton, N.B.

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Across the Desk

By C.A.E.

Fine Accident-Free Record at Colgate-Palmolive

In recognition of its outstanding record of operating for two million man hours without a lost-time accident, Colgate-Palmolive-Peet Company, Limited, has been awarded an imposing bronze plaque. The record which is still unbroken, now considerably exceeds two million man hours.

When making the award to Colgate President, Mr. C. R. Vint, Mr. R. G. D. Anderson, General Manager of the Industrial Accident Prevention Association, commended not only the management of the company for its educational programme on plant safety, but stressed the fine job of the employees and the joint management-employee safety committee, which carries out monthly inspection tours in the interest of operational safety.

* * * *

Crane Eye-Wash Fountain

Crane Limited announces distribution of the Haws Eye-Wash Fountain and Drench Shower Attachment, for immediate first-aid bathing of eyes and face injured by chemicals, metal particles, or other foreign objects. In an instant, the worker can deliver a twin stream of clean water into the eyes and spray the head.

The Fountain and attachment is as easy to operate as any drinking fountain. An accident victim can give himself effective first-aid treatment without waiting for other assistance.

A folder with further valuable information on Haws Eye-Wash Fountains is available from any Crane representative.

* * * *

General Laboratories Make Major Move

General Laboratories Limited, sole distributors for Canada for Intradex, the new plasma substitute,

(Continued on page 16)

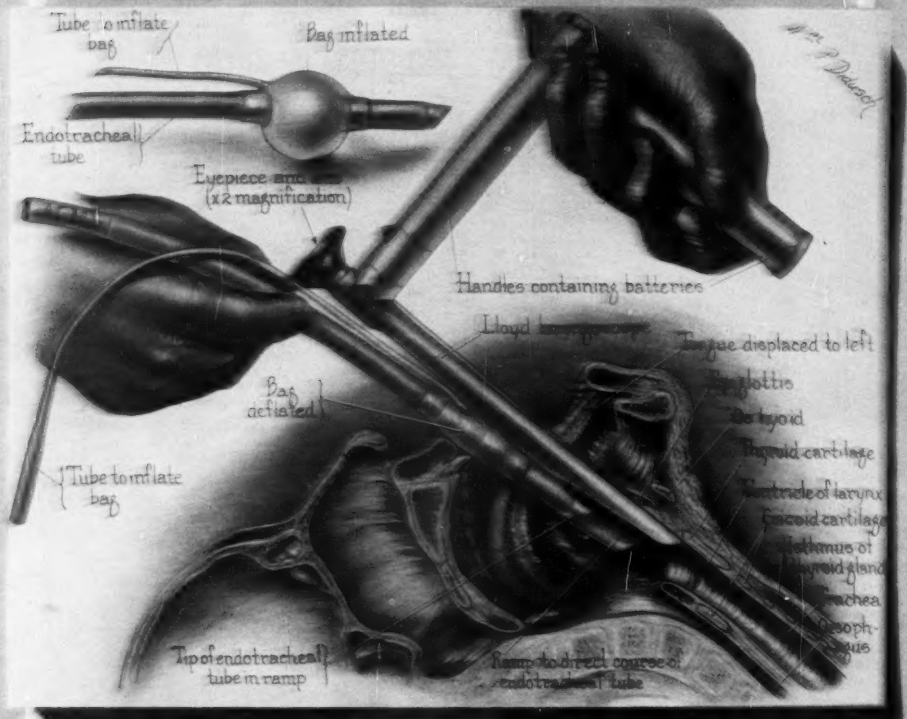
THE LLOYD LARYNGOSCOPE

for

INTUBATION IN INTRATRACHEAL ANAESTHESIOLOGY

Lloyd Laryngoscope
Cat. No. 4775

Endotracheal Catheter
Cat. No. 2548



Technic: After the epiglottis has been picked up on the tip of the speculum, the lubricated endotracheal catheter is loaded into the ramp; the larynx is exposed and the tube pushed through the glottic chink to the desired depth.

The eyes of the operator are protected against cough and throughout the intubation procedure uninterrupted visualization is maintained of both the glottis and the catheter. The handles contain four pencil type batteries in parallel series that insure long service and adequate illumination.

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"EASIER ON LINENS"

MISSOURI METHODIST HOSPITAL laundry has 3 Troy stainless steel "Slyde-Out" Washers in service. A scoop of the arm slides linens from washer to truck tub.

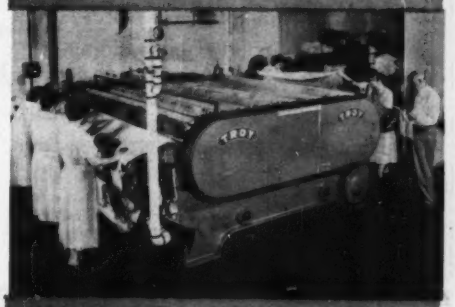
When Missouri Methodist Hospital, St. Joseph, Missouri, decided to modernize their laundry, hospital officials made a careful study of available equipment. As a result of their investigation, they selected Troy machinery exclusively, including easy-unloading Troy "Slyde-Out" Washers.

After a year's operation of their new laundry, G. M. McNeil, laundry manager, says:

"I can say that in more than 40 years of laundry work, these Troy machines are better by far than any other machines I have ever used. The washers are much easier on linens and do better work with less supplies and do the job faster. They are easier to operate and keep clean."

Hundreds of hospitals are enjoying better quality work at lower cost with Troy laundry machinery. Your experience can be the same! Write today for catalogs and prices on Troy's complete line of laundry equipment.

Another section of Missouri Methodist Hospital laundry showing 2 Troy Open-End Drying Tumblers and Troy 40" Atlas Extractor.



Troy 120" 6-roll ironer produces beautifully finished flatwork for Missouri Methodist Hospital. This ironer is equipped with a centralized lubrication system, an accessory which simplifies maintenance.

Troy

LAUNDRY MACHINERY

Sold and Serviced by:

McKAGUE CHEMICAL CO. Toronto

HARRISONS & CROSFIELD Vancouver, Calgary, Edmonton, Winnipeg

MARTIN KIELY CO. Montreal

Across the Desk

(Continued from page 12)

have just moved into modern new offices in the Markad Building at 430 King St. W., Toronto.

The move represents still another step forward for this progressive company. Expanding operations created an urgent need for larger quarters. The new offices offer more space, improved facilities and the opportunity for the General Laboratories staff to render better service to the medical profession and hospitals in Canada.

* * * *

Gordon A. MacEachern Appointment

The firm of Gordon A. MacEachern, Floor Finishing specialists, announces the appointment of Earl P. Killoran in charge of sales, Northern Ontario Division.

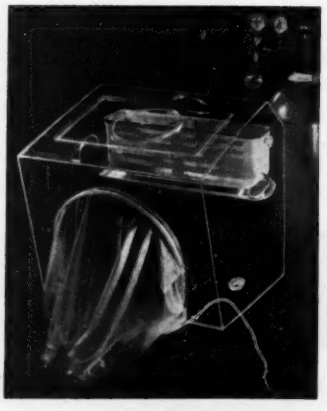
Earl P. Killoran

Mr. Killoran is a floor finishing engineer and his experience with this well known Company will prove invaluable in the services and sales of their products which includes soaps, waxes, floor finishes, floor machines and allied equipment.

Mr. Killoran will make his headquarters at Sudbury, Ontario.

* * * *

O.E.M. Re-Designs Thermal-Ox Tents

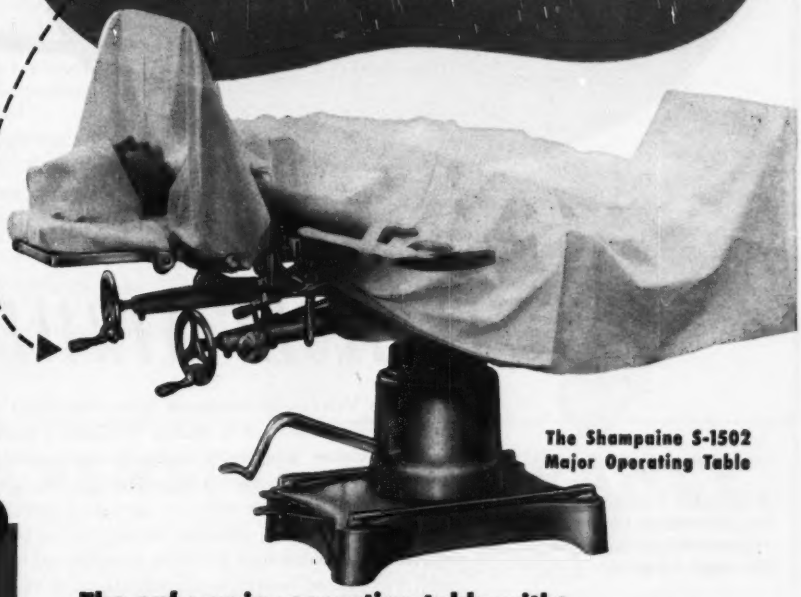


O.E.M. Thermal-Ox Tents have been redesigned for greater strength and advanced styling, according to an announcement by O.E.M. Corporation.

The new Tents are equipped with removable ice chambers made of "Royalite", the new, very strong and easy to clean plastic. They have

(Concluded on page 20)

How to *Control* the Sterile field



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Name of my dealer_____
No obligation, of course.

Name_____

Address_____

City _____ Zone ____ Prov. _____

Across the Desk

(Concluded from page 16)

been re-engineered to provide a minimum of cemented panels.

Illustrated literature is available from O.E.M. Corporation, Fitch Street, East Norwalk, Conn.

* * * *

Cold-Feet Warmer

The improved Thermo-Mat provides warm-foot comfort for persons who must sit or stand in vestibules, at desks, and at other countless locations where heat is insufficient or otherwise impossible to obtain. Thermo-Mat simply plugs into any ordinary 110-120 volt outlet, and can be operated

all day for a few cents. Temperature is reached after a few moments of operation and remains uniform. Radiant heat developed is unusually penetrating. Warmth extends to knee height.

Unit consists of a special metallic resistance embedded in a reversible, ribbed neoprene rubber compound which is tough and long wearing.

Thermo-Mat is safe from shock and fire hazards and can be used even on damp concrete. Size: 14" x 22". Manufactured by Thermo-Mat Co., 814 So. Robertson Blvd., Los Angeles, Calif.

* * * *

New Bulk Sterilizer Catalog

American Sterilizer Company incorporates many new design and construction features in its extensive line of Bulk Sterilizers. All-welded construction eliminates stay bolts and rivets; nickel clad chamber shell is corrosion resistant. Cyclomatic Control permits one point automatic control of the sterilizing cycle removing any chance for human failure.

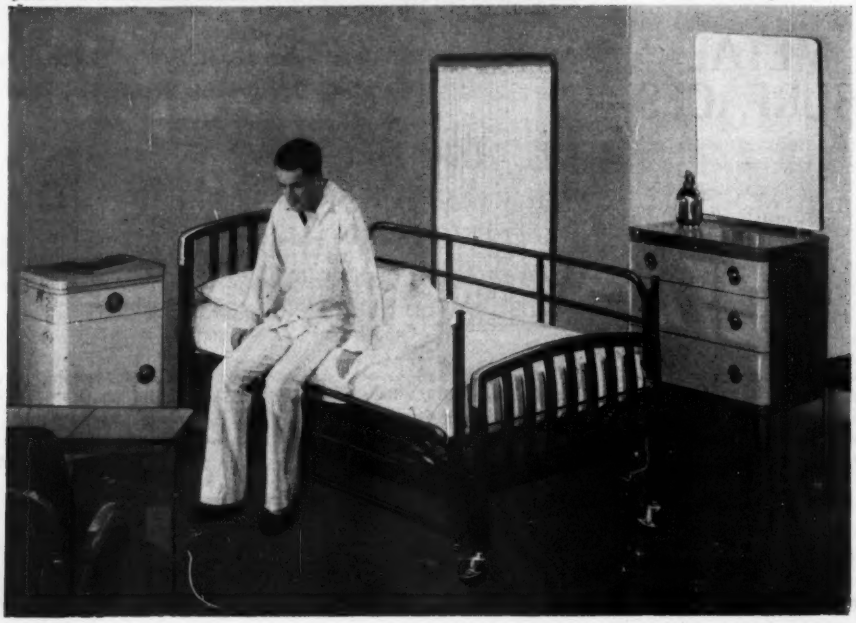
New American sterilizing techniques with steam and Carboxide gas have greatly extended the field of application of these units into Surgical Supplies, Pharmaceuticals, Packaged Dry Goods, Hair, Bristles and Bristle Products and Food Processing.

You are invited to write for a copy of Catalog C-105R-27, American Sterilizer Company, Erie, Pa.

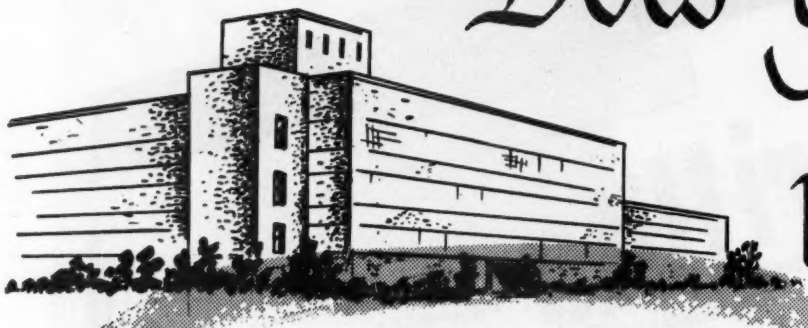
Vari-Hite in the raised position with both sides up eliminates dangers from falls. Note special bracket for holding crank when not in use is easily accessible but out of sight.

"Up position"
Spring is raised to 28" from the floor — the bedside can be lowered (as illustration) and does not have to be removed.

"Down position"
Vari-Hite in the lowered position ends patients' fear of being at an unfamiliar height. — It can be easily raised from either end or either side to hospital level for treatments.



Does your need



If yours is one of the many voluntary hospitals without enough beds to serve its community fully and adequately, and without sufficient funds to provide them, then the following message is of vital concern to you, your hospital and your community.

If you are the head of a voluntary, non-profit hospital in need of additional facilities, you are in an excellent position to obtain building funds if you can answer "YES" to each of the following statements:

1. *Your community has a* **demonstrable** *need for more hospital beds.*
2. *Business, industry, commerce and individuals in your community have enough* **disposable** *income to permit them to contribute to your hospital.*
3. *A representative proportion of the* **leading** *citizens in your community have, or could be induced to take, an active interest in your hospital.*

If your answer to any of these statements is "NO", then your chances of obtaining the *large* sums of money required to meet present day hospital construction costs are poor.

What if the answer to all three is "YES"? You can follow one of two courses:

You can make your own appeal to the community, pointing out that it needs more hospital facilities for its own protection, that the money is available, that you need so many hundred thousand or so many million dollars and will the community please contribute the money?

Such a self-directed appeal will bring in many contributions. It may, if unusually successful, bring in a great many contributions. But invariably you will find that the total of all the contributions is an insignificant fraction of the amount you need even for the most modest hospital expansion.

Obtaining the many LARGE contributions that will add up to the total you will need, involves highly complex and highly skilled techniques. These techniques cannot be learned over night. Their successful application takes many years to perfect. No matter how willing, how hard working and how conscientious the workers in a self-directed appeal may be, the simple fact is that they do not have the techniques necessary to raise LARGE sums of money.

If this were not true, there would be no need for professional fund-raising organizations such as Lawson Associates.

hospital more beds?

Your second course is to consult a reputable, experienced, professional hospital fund-raising counsel. This consulation will cost you nothing. If you were to consult Lawson Associates, here's what would be done:

Following the consultation, the Lawson research staff would survey the economic, social and psychological factors in your community which affect the outcome of a hospital fund-raising campaign. (This survey also is generally provided by Lawson Associates at its own expense.)

If analysis of the survey data indicated that a campaign could be successful, you would be so advised and would be told the reasonable amount the campaign could be expected to produce.

(If a campaign were not deemed feasible, you would be given the reasons. We cannot afford to become involved in a campaign that is apt to fail because it would injure our reputation and harm our business.)

When a campaign is feasible, a detailed Plan of Campaign, tailored to the specific needs of your hospital and your community, would be prepared. This written plan states exactly what will be done, how it will be done and when it will be done.

With this plan you would receive a contract form giving the fee for our services. This is always a fixed fee, never a percentage of the goal or of the amount raised. You also would receive an estimate of what it would cost, in addition to our fee, for clerical help, postage, promotional literature and other campaign expenses.

A well-trained, experienced Campaign Director, with the necessary number of Associate Directors, would move into your community to devote themselves to the success of your campaign. It is to the interest of these directors to make your campaign a success because their future and that of the firm for which they work depend upon it.

These men direct, inspire and train the volunteer workers. They guide you in selecting and enlisting the top campaign personnel. They keep the activities outlined in the Plan of Campaign moving smoothly and on time. They prepare all the written material used in the campaign and handle all the publicity and public relations.

These are but a few of the major reasons why—if your hospital needs funds for expansion—you will be wise to consult Lawson Associates. You have everything to gain, nothing to lose, through this free consultation.

For a more detailed account of how professional hospital fund-raising can help you and your hospital, we have prepared a FACT FILE on the subject which will be sent to the head of any hospital requesting it on hospital stationery. Write Dept. CH-11

Lawson Associates
INCORPORATED

ROCKVILLE CENTRE, NEW YORK

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CANADIAN HOSPITALS HAVE ACCLAIMED THE (Patented) PORTABLE COMMODE CHAIR

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Users* Say...

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". . . The nurses report that the chair is used a very great deal in taking the patients to and from the bathroom and have found it very useful as well as very satisfactory."

From a Quebec Province Hospital . . .

". . . the Portable Commode Chair which we purchased from you this past summer, has proved quite satisfactory. . . . It is particularly useful for elderly operative patients with cardiac conditions who are unable to make the exertion of walking . . ."

From a British Columbia Hospital . . .

". . . they are proving very satisfactory and as a result orders were placed for six more of these chairs to be used in the new Home for the Aged Building . . ."

Chair with Bed-Pan Holder.

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You'll discover these and many other "extras" in this custom-made laundry compound when you put it to work in your laundry department.

Attractive satin-finish stainless Troy washers enhance the appearance and increase the efficiency of many modern laundries. Our representatives are available to assist you in choosing, maintaining and repairing such equipment.

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L. O. Bradley, M.D., Editor

CANADIAN HOSPITAL

Toronto, February, 1952 Vol. 29 No. 2

Obiter Dicta

Progress in Hospital Accreditation Program

NEARLY two years ago, the American College of Surgeons indicated that it could continue no longer to bear the burden of its program of hospital standardization. This precipitated a prolonged discussion between interested parties in the United States (the American Medical Association, American College of Surgeons, American College of Physicians, and the American Hospital Association) concerning the sponsorship and direction of a program of accreditation. A great deal of water has gone under the bridge in the interim, much of it turbulent. However, common sense has prevailed and a solution to the problem has been reached in that country.

The first meeting of a newly incorporated body, the Joint Commission on Accreditation, was held in Chicago, Ill., in December, to take initial organizational steps. Its membership is composed of three representatives from the American College of Surgeons, (one a Canadian), three from the American College of Physicians, seven from the American Hospital Association (one a Canadian), six from the American Medical Association, and one representative from the Canadian Medical Association.

This new development has been watched very closely here in Canada because hospital administrators and medical staff are well aware of the far reaching values that have accrued from the standardization program of the A.C.S. There has been an added measure of pride throughout the years because of Dr. MacEachern's part in the activity. Thus, there has been widespread interest across this country concerning a replacement for that fine service.

In order to examine the whole situation as it affected Canadian hospitals, a special committee was appointed at the last biennial meeting of the Canadian Hospital Council. Early in the meetings that followed, it became clear that every effort must be bent to make available a sound program of inspection and accreditation for Canadian hospitals. The question of a Canadian organization to carry out the inspection came under scrutiny, as well as relationships with the Joint Commission and with other Canadian bodies.

A milestone was reached on January 18th, when representatives of the Canadian Hospital Council and the Royal College of Physicians and Surgeons of Canada met with the Canadian Medical Association's committee on hospital standardization. As a result of this conference, the formation of a Canadian Committee on Hospital Accreditation was recommended to the parent bodies.

It will be, in effect, a ways and means committee to work out the most effective and acceptable method of providing a program to all Canadian hospitals. One of the most difficult problems that this group must tackle will be the financing of a good program of inspection. If this program is to be carried out, it must be done well and this will mean that a sound and sufficient source of income must be developed.

Hospital administration has an increasing responsibility to maintain a high quality of hospital care. It is greater because of the increasing volume and complexity of hospital service. One means of meeting this task is to have the support of a strong independent body that can evaluate objectively the service of each hospital and help it where possible.

Every hospital has a stake in the work of this new committee and should give it their outright support.

Hospitals Owe to the Public an Account of their Stewardship

AS OF now the cost per day of hospital service is higher in terms of dollars and cents when compared with past years. But so is the daily cost of everything in the community. Consider the over-all price of : gasoline, coal, writing paper and envelopes, brooms and mops, soap, potatoes, beef, lettuce, celery, canned fruit and vegetables, postage, express and cartage, telephone, taxes, clothing and shoes, sheets and pillow slips, nails, putty and window panes, a motor car, chairs, desks, and filing cabinets, drapes and rugs, cigarettes, candy and chocolates, flowers, cosmetics, alcoholic concoctions, and so on for several chapters. It is absurd to use household supplies as a yardstick to measure the price of good health or the cost of sickness but the comparison can readily be understood.

In his own home John Doe wonders why Jane Doe (his wife) is demanding more and more of his pay cheque to keep the household comfortable and content. Only when John is dragged, infrequently and unwillingly, to shop for the family groceries does he recognize and realize that times have changed. A parallel can be drawn with the hospital patient, who is perhaps less unwilling to go to hospital than to go shopping; or it may be applied to the parent or relative responsible for the hospital account. Although the incidence of hospital admission is steadily rising, hospital experience per family, is still an infrequent occurrence. So when John or Jane Doe or one of their family do require hospital care, the price tags are unfamiliar because they have been enjoying good health and have had no occasion to purchase hospital services.

The parallel stops here for it is not feasible to sell each citizen a bigger or better package of hospital service each time an increase in rates is necessary or some new diagnostic test or treatment is added at the hospital. But there are other methods and means of letting every John Doe and family of the community know about the business aspects of hospital operation. Sound financial management is respected in any community enterprise and will be looked upon in the hospital as good business too.

The 1951 experience of your hospital is now available—the volume and range of services provided for both in-patients and out-patients and the costs of keeping these services ready for 8,760 hours last year. If the hospital holds back this information, either purposely or because of a poor public relations program, it cannot be expected that John Doe *et al* will become familiar with or concerned about hospital affairs. And John Doe and his neighbours are in this picture because, in one way or another, they foot the bill.

The techniques of getting this information across will depend upon local resources but particularly upon initiative and energy. It should be planned as an integral part of a continuing program of community relations and begin without delay. The time is ripe to take advantage of the bright new service statistics and records of expenditures for 1951. It is not generally known that the dietary service alone uses up 10 to 15 per cent of the hospital budget, that 45 to 65 per cent is returned to the locality in salaries and wages, and that drugs, medicines and prescriptions make up another 8 to 12 per cent. The cost of x-ray and laboratory procedures in the patient's bill and the number of these procedures per patient might well be used to point up the increasing role of the hospital in diagnostic services.

Nor do many citizens realize that the length of stay has been shortened to such an extent that the cost to the patient *per stay* is about the same or even less than it was say five years ago. Too few people realize that the advances in hospital care are dependent upon elaborate facilities and good organization. Thus in interpreting dollars and cents it is important to show that our hospitals are literally "performing miracles" in saving lives.

If an active program to explain the cost aspect of hospital operation is allowed to die in a few months, it may be labelled as a mercenary attitude on the part of that hospital. If the program of community relations continues and is expanded to cover other aspects such as recruiting and staffing, education, research, special services, and so forth, it will have a much more lasting effect. A special effort is being encouraged this year to make National Hospital Day on Monday, May 12th an important community occasion. Plan for it now.

John Doe and Jane and the family are vitally interested in good hospital service. Therefore, as trustees and administrators and members of the hospital staff, we have a responsibility to foster and develop their interest. Hospital service depends on the community as a whole.

"The Buyers' Directory" for 1952

EACH February, *The Canadian Hospital* carries, as a special feature, The Buyers' Directory. Occupying some 16 pages, the "Directory" provides our readers with a concise summary of the main products or services of our advertisers. The names of well-known and established suppliers of a wide range of hospital equipment and supplies may be located easily in this section.

A few minutes of reference now, to this year's directory, will prove to be a great time saver, as well as providing informative material to the administrator, the purchasing agent and, indeed, to all departments, during 1952.

The use of this special section, together with the information introduced by our advertisers throughout the year, will supply hospital people with up-to-date information of this nature. Further, a knowledge of its contents will be useful when visiting exhibitors at hospital association meetings.

Medical Audit : a Symposium

I. An Administrator Speaks

Sister Alice M. Herman, Reg.N.
Administrator,
Edmonton General Hospital,
Edmonton, Alberta.

IN THIS age of hospital development and expansion more efficient methods of hospital practice are being introduced into our institutions of healing. Uniform and complete systems of business accounting have resulted, to a great extent, from health service plans throughout the continent. The trend towards health insurance and the awareness, on the part of a more enlightened public, of the need for well-equipped clinical facilities have placed hospitals on a sounder business basis.

Though of seemingly slower evolution than business accounting, professional service accounting now finds a place as part of the administrative plan of all well-organized hospitals. It is a method of determining the competence of members of the medical staff. From the standpoint of the governing body it is a means of providing the patient with the best possible care through a well-organized and efficient medical staff. The auditors are experts selected by the medical men themselves and approved by the Administrative Board*.

In the Edmonton General Hospital, medical auditing came about as a result of the revision of the Constitutions and Bylaws of the Medical Staff in 1948. The Administrative Board, realizing its responsibility to provide the best quality service to its patients, initiated a progressive change. The Constitutions and Bylaws of 1929 proved inadequate when the hospital expanded. Therefore, a committee to revise the Constitutions was set up, composed of two members of the medical staff and two from the Administrative Board.

The following were among the purposes of these new bylaws.

1. To encourage in every way possible the professional and fraternal spirit in the hospital through a firm insistence upon:

(a) The keeping of true, complete, and accurate records of all cases;

(b) The practice of frequent and friendly consultation on all difficult and baffling conditions;

(c) Safeguarding of patients against unnecessary and incompetent surgery and other treatment;

(d) Periodical clinical conferences on the quality of work done and progress made during the previous period.

2. To make it possible for the hospital Administration Board to conduct the institution in a thoroughly organized and up-to-date manner.

In addition to the above, Article VI, *Officers and Committees* provides for a medical records committee whose duty it is to audit the records of all patients discharged during the week. A report of these weekly auditings is made to the medical staff at the monthly meeting at which a member of the Administrative Board is present.

Though the medical audit is intended primarily for evaluating the services of individual members of the medical staff, it also censors the function of the various diagnostic and therapeutic services of the hospital. The necessity for accurate records, therefore, cannot be overemphasized. A well-organized and efficient medical records department is essential to good hospital administration. It follows, then, that the interdepartmental relationships have a bearing on every phase of the hospital's activity. Thus the medical audit will reflect the degree of organization within the institution. If the hospital is well organized the medical audit will be more accurate. To understand better the medical audit of the Edmonton General Hospital, it would be helpful to consider the general administrative plan of this institution.

The general administrative plan of the Edmonton General Hospital is similar to that of other hospitals conducted by the Grey Nuns of Montreal. The Governing Body consists of six members elected for six years. As the headquarters of the Institute are in Montreal, a Regional Board is appointed by the Governing Body, to act in its place with restricted authority. A local council of three Sisters, appointed by the Governing Body, comprises the Administrative Board. The Sister Superior is the administrator of the hospital.

A group of men from various non-medical fields form the Advisory Board. This boards acts only in an advisory capacity on matters pertaining to business and public relations.

The hospital administrative organization is composed of various divisions, medical, nursing, business et cetra, each of which are departmentalized. Department heads are directly responsible to the Administrative Board through the administrator.

In every well-organized hospital today the medical audit is used as a means of self-improvement, for the better care of the individual patient for whom the institution exists. Though the evaluation of professional service cannot be absolutely accurate, its value to the hospital, the physician, and the patient warrants its continued use in all hospitals of today.

*At the Edmonton General, it is composed of the Sister Superior, who is the administrator, and two other Sisters, all appointed by the Governing Body.

2. Viewpoint of Medical Staff

M. M. Sereda, M.D.,
S. Hanson, M.D.,
Edmonton General Hospital,
Edmonton, Alberta.

THE IDEA of a medical audit was introduced at our hospital quite incidentally in 1948 as part of a new constitution. This was based on a model constitution suggested by Dr. Malcolm MacEachern in his text book "Hospital Organization and Management". With some misgivings the executive of this staff proceeded to apply the principles of the audit to the work of the entire medical staff. With full co-operation from the latter body these principles have been adhered to since that time.

We shall endeavor to present briefly the organization which has evolved, our experience with this method of control over the quality of professional work in the hospital, and some general comments.

The Plant and the Staff

Administered by the Grey Nuns, the hospital's 275 beds help serve a community of over 150,000. It is an "open" hospital although 79 of its staff of 166 hold only courtesy status. The attending staff has a general practice section, members of which may serve on all committees. This hospital is privileged to be associated with the University of Alberta Medical School in an integrated program of undergraduate teaching.

Records Committee

The records committee does the actual "stock taking". Once a week it reviews all the records noting particularly completeness of diagnoses, complications, deaths, et cetera. A written record is made of these "debit" items and this, in a summarized form, is later presented by the chairman to the Program and Executive Committees.

Pathology Department

The pathology department is the repository of considerable "organic" material which frequently reflects, in a general way, the standard of medical practice. The pathologist keeps all data organized and available for presentation to the Program and Executive Committees and is a member of both.

Program Committee

The Program Committee holds its meeting each month just prior to that of the Executive. After receiving full accounts from the records chairman and the pathologist, as well as gleanings from the wards, it chooses the case or cases which in its opinion represent the weakest phase of medical practice at the time and from which the staff is likely to learn the most.

A report of these proceedings is presented at each meeting of the staff executive and it is this latter body which finally approves the program for the monthly staff conference. Those who must present this program are then notified by the secretary. It has been our experience that if too many cases are discussed at one meeting the analysis of these becomes superficial and often the most important lessons are lost completely. It seems preferable to consider one or two cases in detail and to allow ample time for discussion.

Monthly Staff Conference

Conforming with our constitutions, no abstract medical scientific discussions are allowed. Following luncheon there is a short business session which includes two items pertaining to the audit: study of a mimeographed summary of the staff's clinical work during the preceeding month and final comments by the Records Committee chairman on the state of the records. Then follows presentation, by the doctors in charge, of the cases previously chosen. The pathologist reports his findings. An expert in the particular field, having been invited beforehand, now opens the discussion.

When this type of program was first instituted there was a feeling that certain members were being "put on the spot". By the maintenance of complete impartiality and an impersonal attitude this feeling has almost completely disappeared. The principle that every doctor, general practitioner or specialist, should be prepared to justify his management of any case before a "jury of his peers" has been accepted, with marked improvement in the standard of medical practice. One often hears the comment, "Before I operate on anyone in this hospital, I'll make certain that the case is well worked up."

There Is More to the Audit

The foregoing is only one phase of a complete medical audit, albeit the most important.

Weekly ward rounds are held to consider, chiefly, the cases still in hospital who present special diagnostic or other problems. Here it is even permissible to show one's triumphs in management.

Weekly clinicopathological exercises are held during the medical school term. These deal with older cases, nevertheless problem cases, from this hospital.

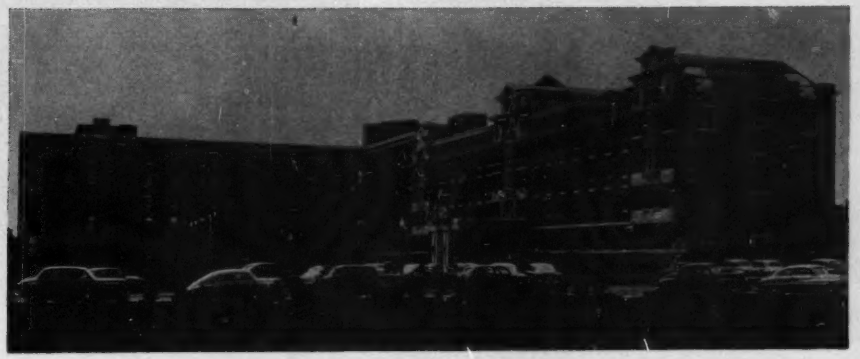
Finally, from time to time, heads of departments present annual summaries before the monthly staff conferences.

Further Comments

The Hosptial Administration has co-operated in this program without at any time taking the initiative. This would appear to be the most desirable situation. Equally important is the avoidance of publicity and fanfare. The principles of the medical audit should be introduced into the constitution just as is any other essential hospital routine.

We are convinced that only the "debit" entries from the medical audit should be allowed to constitute program material for the monthly staff conferences. Presentation of successful or interesting cases generally leads to sterile platitudes and no improvements in the standards of practice. An experienced conference chairman is essential. He must spark the discussion, which is of-

(Concluded on page 92)



North view of new wing, left, with administration building, right.

Spacious Additions to University of Alberta Hospital

Ernest C. Shortliffe, M.D.,
Administrative Resident,
University of Alberta Hospital,
Edmonton, Alberta.

SINCE 1922, when the University of Alberta took over what was the Strathcona Hospital in South Edmonton, the hospital has grown steadily in size and the scope of its activities. At the end of World War I its capacity was 150 beds and when it was acquired by the University an additional 70 beds were added as a Soldiers Civil Re-establishment Unit. In 1929, the bed capacity was increased to 400 and, in 1945, the Mewburn Pavilion of the Department of Veterans' Affairs brought the total capacity to 650 beds.

The most recent addition to the University of Alberta Hospital is a six-floor, brick and re-inforced concrete wing of 400 beds. It was officially opened on September 4th, 1951, and the net gain in beds raised the capacity of the hospital to 925. At the same time, a new entrance to the main building was constructed and the food and laundry facilities were enlarged to meet the demands to be made upon them. The result is a large, modern, general hospital, actively engaged in the care of the sick, the education of professional personnel, clinical research, and co-operation with the local public health authorities, as the needs of a growing area are met.

New main entrance, administration building

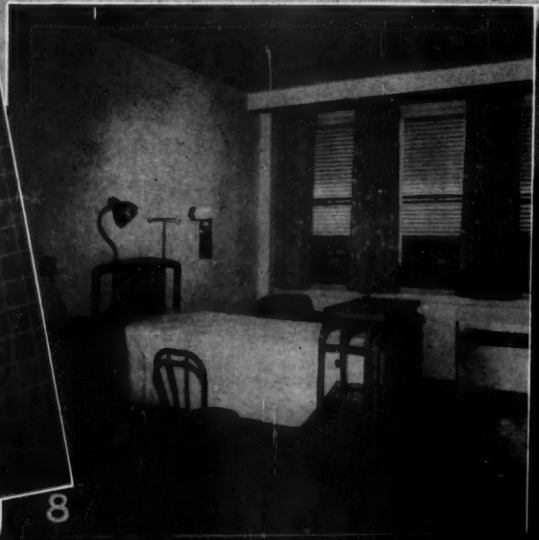
Entrance and Admitting Facilities

Admitting facilities have been kept in the main building in close proximity to the department of radiology, the emergency examining room, and the business office. The main entrance has been enlarged to include an information desk and mail facilities. There is an area for persons waiting for taxis and buses. The entrance is on the true ground level and steps lead up from it to the main floor and down to the ground floor where the admitting office and washrooms are located.

The admitting office is conveni-

University of Alberta Hospital . .

1. The south side of the new wing.
2. The main rotunda in the new wing, looking north along the corridor towards the main building.
3. Nurses' stations are close to elevators. The glass superstructure assures privacy, yet permits supervision.
4. A glimpse of the dietitians' offices, from the central servery.
5. Large, bright solaria, such as the one pictured here, feature modern design and furnishings.
6. In each of the case rooms, oxygen, suction, and nitrous oxide are all supplied through the one wall installation.



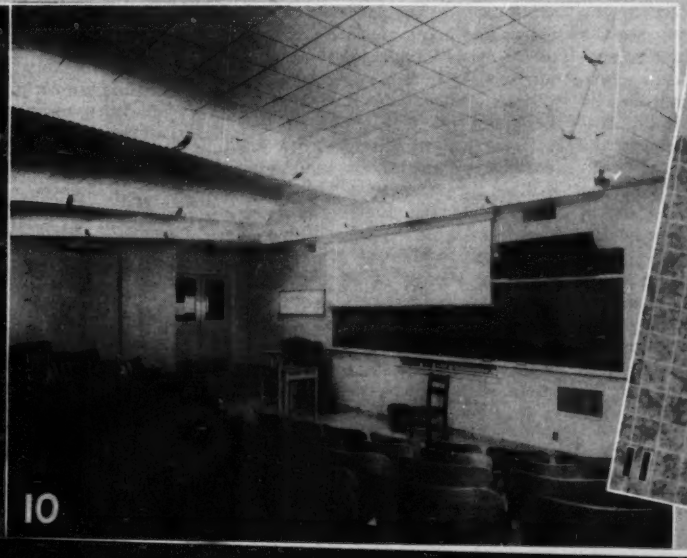
7. This view of the cleaning cupboard in the delivery suite shows the tile walls, terrazzo floor as well as the central vacuum unit and other cleaning equipment.

8. Matching furniture in this private room is painted to blend with the decorative scheme.

9. School should be fun in this brightly furnished classroom in the children's section.

10. The main amphitheatre has seats arranged in tiers, a large green board, with view box to the left.

11. One of the modern fire prevention installations.



ently situated across the corridor from the medical records library and the elevator. The emergency unit, dispensary, and clinical laboratories are located on the same floor and are within easy walking distance. The business office and the department of radiology are on the main floor and may be reached by elevator or steps.

The waiting room of the admitting department is equipped with leather upholstered furniture which matches the basic colour scheme of the linoleum tile floor and the painted walls. Interviews are conducted in the privacy of either of two cubicles surrounded by ribbed glass partitions. Between these cubicles is a control area where the chief admitting officer may supervise the admitting procedures, reservations, and transfers. Behind the cubicles are the filing cabinets and a storage vault for patients' valuables. The woodwork is of oak veneer and, in keeping with the finish in the new wing, this is in a natural tone. Generous use has been made of fluorescent lighting. In the near future it is hoped that an adjoining room will house a unit for admission chest radiography.

The New Wing

The exterior architecture of the hospital has been followed as closely as possible in the new wing. Less use has been made of decorative granite trim but this has detracted in no way from the blending of old and new. Any departure from the older style of architecture has been confined largely to the south face of the new wing. Here one may see the use of more modern lines as represented by the curved sun rooms at each end of every floor and by the granite facing which surrounds the south entrance to the building.

The interior is marked by the generous use of colour. Most of the woodwork is in natural tones but the walls and ceiling have been decorated throughout in modern pastel hues. This is best seen in the solaria where, though the furnishings vary considerably, the colours used on walls, drapes, and upholstery, blend to create the restful atmosphere desired. The inlaid linoleum floor covering used throughout most of the hospital has been carefully chosen to fit the colour scheme variations.

Colour has also been used freely in the patients' rooms. Private, semi-private, and four- or six-bed rooms have been treated individually. The variety in decoration has served to give each room its distinctive qualities.

Each private room has its own clothes closet and lavatory. The latter includes a hand basin and a toilet complete with flexible hand spray to facilitate the handling of bed pans. Similar facilities are shared by adjoining semi-private rooms but here each has its own hand basin and built-in clothes lockers. Standard wards have built-in clothes lockers, hand basins, and toilets also. All rooms are supplied with oxygen inlets which are fed from a central oxygen supply.

Silent electrical switches have been used throughout the new wing and are part of the modern electrical installation which includes fluorescent and various forms of indirect lighting. Grill-covered night lights are used in all rooms and in the corridors. In the rooms they are controlled by switches located just outside the door. Control over all corridor lighting is in the nurses' station where there is also a modern panel for the patients' call system. Call lights can be turned off only at the patient's bedside and emergency calls are registered by a red signal and a buzzer alarm.

The nurses' stations themselves are located at the junction of corridors and command a clear view of the halls. Strategically located mirrors aid in this respect and at the same time add to the spaciousness of the station area. The stations are walled off from the corridor by a curved counter with a glass superstructure. They have built-in chart shelves beneath the desk area which is lighted by concealed strip lamps. Cupboards, dressing rooms, small serveries, and flower rooms are near at hand.

In each station a special dispensing area has been provided. This consists of a small room complete with a dispensing sink and a drug cupboard. The nurse is expected to dispense all drugs here with the door closed and her freedom from distraction otherwise guaranteed.

In special sections of the new wing, such as the neurosurgical or mental reception units, the nurses' station may serve as few as eighteen beds. Larger nursing units exist in most services, however, and it is felt that, with the many modern aids which have been provided, as many as forty or more patients may be cared for efficiently.

Central vacuum facilities have been installed in the new wing as an aid to housekeeping. Each unit is housed in a cleaning cupboard where other equipment is also stored.

Compact fire protection units are located throughout the building. These include a modern fire alarm call system as well as built-in hose cupboards and a carbon dioxide extinguisher. The units are arranged in identical fashion throughout.

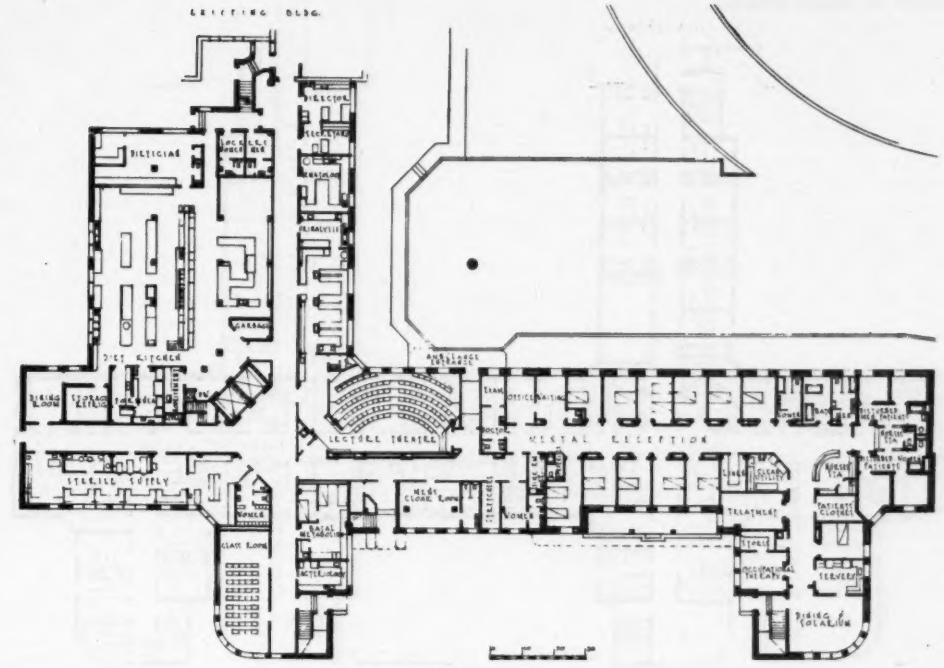
A detailed description of the various sections of the new wing is not possible. However, there are certain features of each floor which are worthy of special mention.

Mental Reception Unit

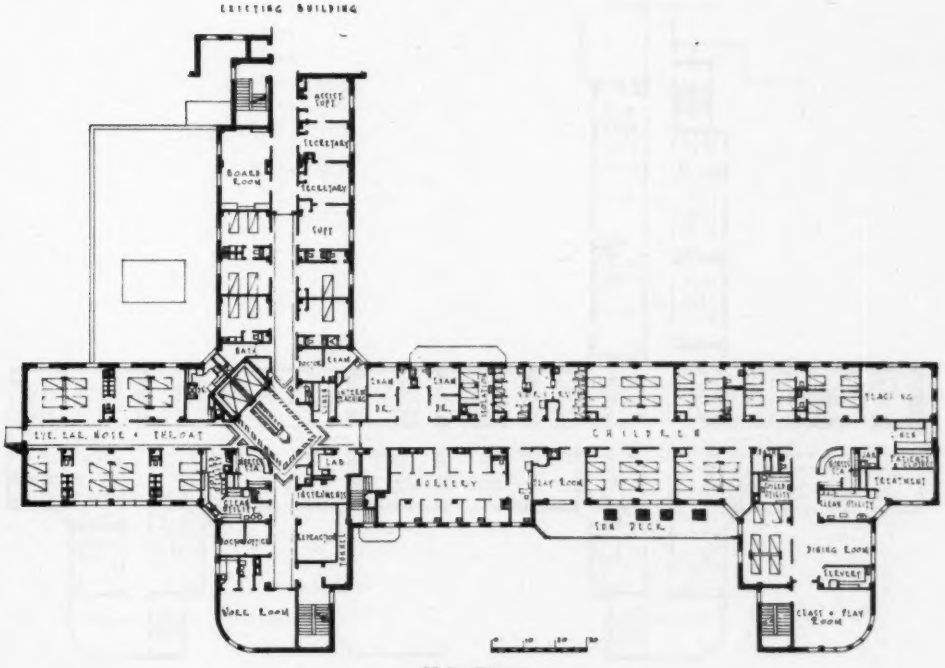
This unit is designed to meet the need felt in most general hospitals for facilities in which the patient suffering from mental illness may be given immediate treatment or accommodated pending transfer to a mental hospital. It is a twenty-bed unit located in a relatively isolated area of the ground floor. Provision has been made in it for the proper care of the disturbed patient and the four rooms allocated to this are arranged in such a way that they may be supervised by a nurse in a special station. The rooms have radiant heating and the windows are of special plate glass construction. The floors are of terrazzo tile. Space has been provided for occupational therapy as well as for the more active treatment of the mental patients.

Educational Facilities

The University of Alberta Hospital is the primary teaching hospital for the medical school.

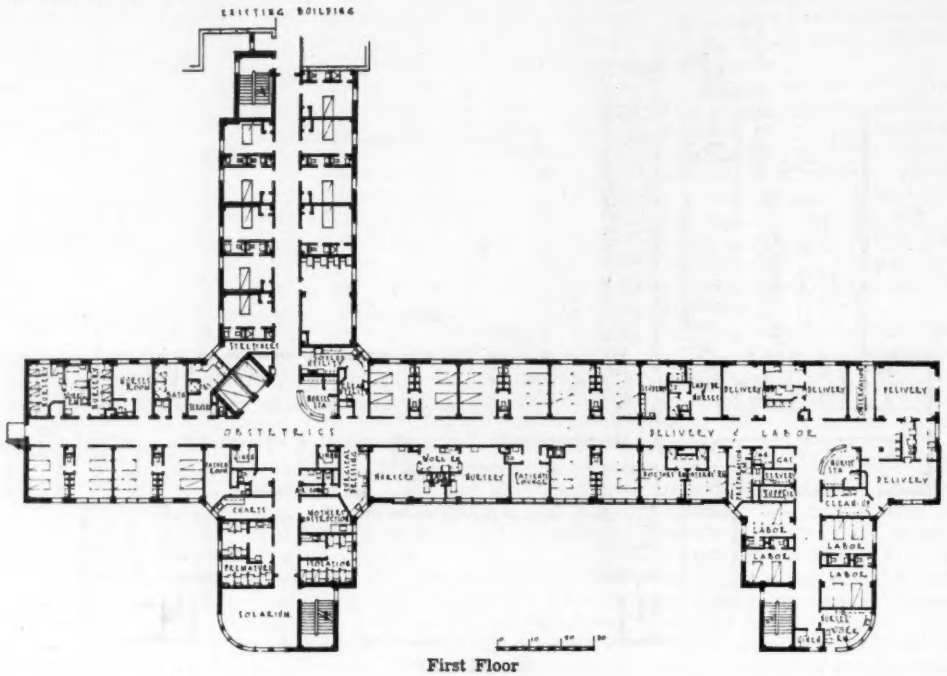


Ground Floor

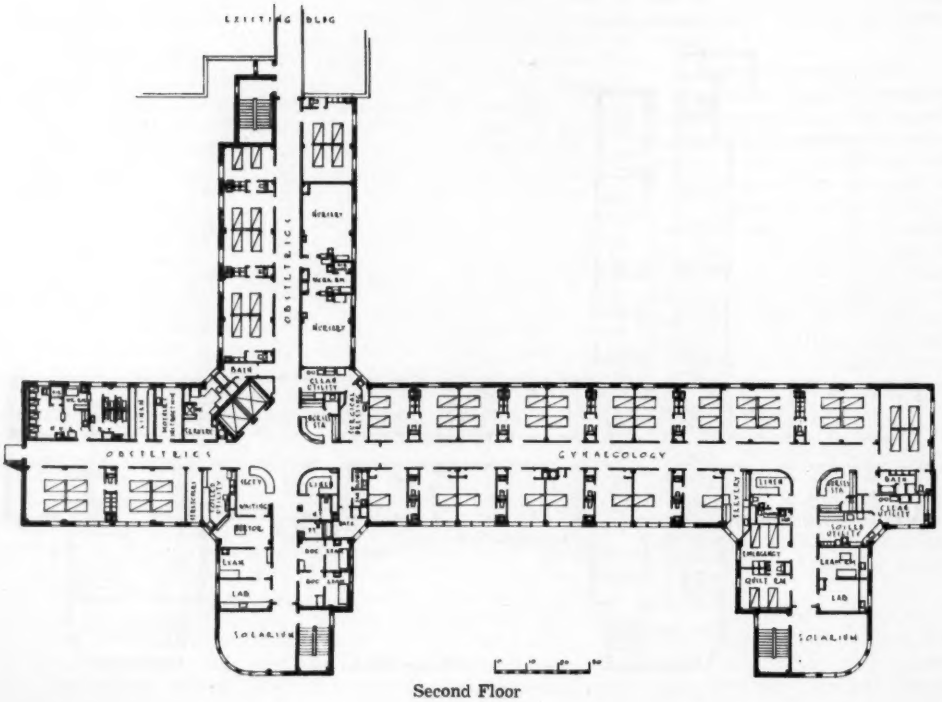


Main Floor

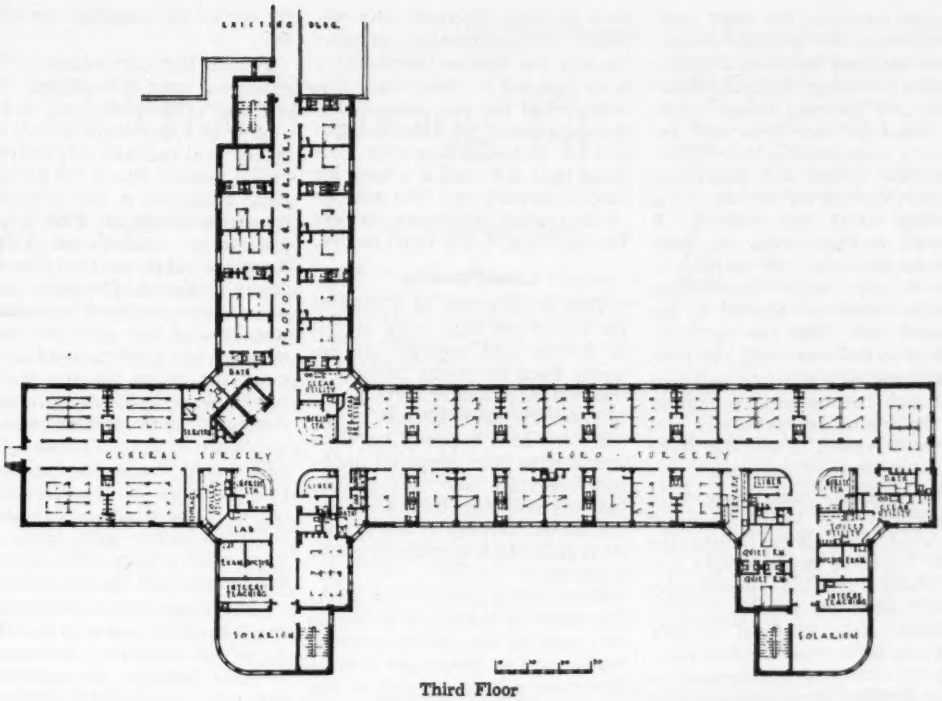
University of Alberta Hospital . . .



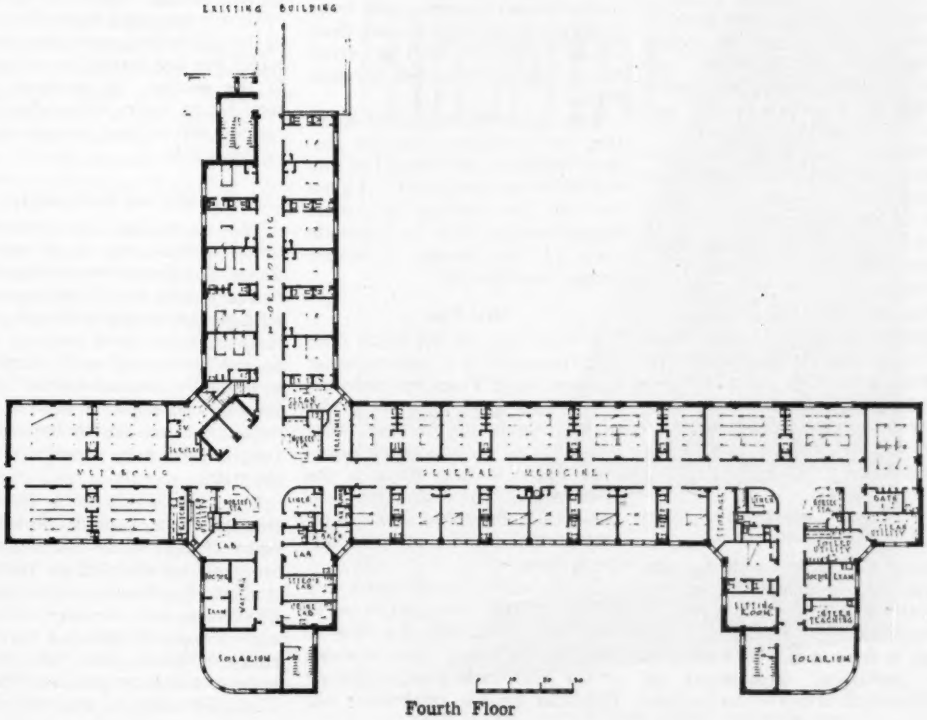
First Floor



Second Floor



Third Floor



Fourth Floor

Special attention has been paid, therefore, to the provision of adequate teaching facilities throughout the new wing. Student laboratories and teaching rooms are to be found on each floor and are usually located across the corridor from the offices and examining rooms provided for the use of the medical staff and interns. A special students' room has been located just inside the entrance to the delivery suite. Comfortable lecture rooms are located on the ground floor. Here the north entrance to the new wing has been designated as a students' entrance although, because of its proximity to the mental reception unit and to the elevators, it will also serve as an emergency entrance.

The students' entrance leads to washroom and lounge facilities situated immediately across the hall from the main lecture amphitheatre. This is a splendid room which seats 106 persons in comfortable seats arranged in tiers. A ramp leads from the door nearest the elevators to a demonstration and lecture area located at the front of the room. Multiple fluorescent lighting units give illumination which may be varied in its intensity. Blackout curtains provide the darkness needed for the use of motion or still pictures. The amphitheatre is air-conditioned, although the windows at the back of the room may be opened if necessary. On each side of the green-board writing space, a group of built-in view boxes, installed at eye level, are located.

The amphitheatre is already in constant use as a lecture room and as a meeting place for staff rounds. A smaller room, located just beyond Central Supply, provides additional lecture space to meet the demands of conflicting timetables.

Central Supply and Clinical Laboratories

Both of these sections are located on the ground floor. The clinical laboratories are of the decentralized type. All tissue pathology is done in the laboratory of the provincial department of health which is located on the hospital grounds. However, the majority of the haematology, urinalysis, and the routine biochemistry is carried out in the clinical laboratories of the new wing. Space is also provided for a B.M.R. room and for electrocardiography. The blood bank is housed in a room for special haematology. The director of the clinical laboratory services has his office in the same section.

Central Servery

This is designed as a control centre for the food being served to private and semi-private patients. Food for public patients is transported in heated carts directly from the main kitchen to the ward where it is placed on trays which have been prepared previously. Private and semi-private patients have their trays served in the central servery where special diets and infant formulae are also prepared.

The central servery has stainless steel equipment. A conveyor belt enables the staff to serve as many as five trays per minute and these are transported to the floors by the elevators. A dumb waiter is used to send special trays to the small serveries on each floor or to transport food or drink which may be required between meals.

The offices for the chief dietitian, her assistants, and the student dietitians are located at one end of the central servery. A glass partition provides privacy, some soundproofing, and an adequate view of the servery to assure proper supervision.

Main Floor

It is by way of the main floor that the majority of visitors enter the new wing. From the main entrance they are conducted to the main rotunda of the new wing where fully automatic elevators are located to take them to the floors above. The main rotunda is beautifully decorated with a recessed ceiling and a coloured terrazzo floor.

In the main rotunda there is a nurses' station designed to serve the 30-bed unit for the care of patients suffering from diseases of the eyes, ears, nose, or throat. Facilities for eye refractions and for special eye dressings are nearby.

Just off the main rotunda is the childrens' ward. Throughout this unit the walls have been decorated with appropriate murals designed to attract and entertain the young patient. These are particularly attractive in the childrens' dining room and play room where miniature, leather-upholstered furniture adds to the pleasant effect produced. The play room for younger children is situated just beyond the crib ward and opens on to a porch which runs almost the entire length of the paediatric unit. This playroom is decorated with cartoon murals which are in sharp contrast to the educational theme in the classroom located at the north-east corner of the building. This classroom is a feature of the childrens' ward where many of the patients are hospitalized for long periods.

Ultra-violet light has been used in all paediatric areas in an effort to reduce airborne infections. A two-bed isolation unit has been provided to assist in the control of communicable diseases. Further control is exercised in the location of the offices and examining room which are just inside the entrance to the section. All patients are seen by an intern who takes the history before they are admitted to the ward.

Obstetrics and Gynaecology

This entire service is divided between the first and second floors. The first floor contains the delivery suite and all private and semi-private rooms, while the public obstetrical beds are on the second floor along with all gynaecological accommodation. The hospital offices of the head of the department are also on the second floor immediately adjacent to the elevators.

The delivery suite is entered through doors which divide it from the rest of the floor. Rooms are provided for doctors, interns, students, and female medical staff. The suite has its own nurses' station and it is intended that the entire delivery area will be as self-contained as possible. There

(Continued on page 94)

Defence Planning Kit

L. O. Bradley, M.D.

MANY hospitals across the country will be at work with the bright, new hospital survey planning kit (see January issue, p. 34). By now, some of them will have outlined their disaster plan for civil defence and will have advanced to more detailed study. All others will be anxious to get started.

If your hospital is quite small and you have not received a kit, it may mean that the Provincial Director of Civil Defence Health Services does not consider it necessary for your unit to organize at this time. However, if your hospital is near a large city or is situated on a main transportation line, your turn will come as the provincial or regional civil defence plan develops. You will then hear from your provincial civil defence authority.

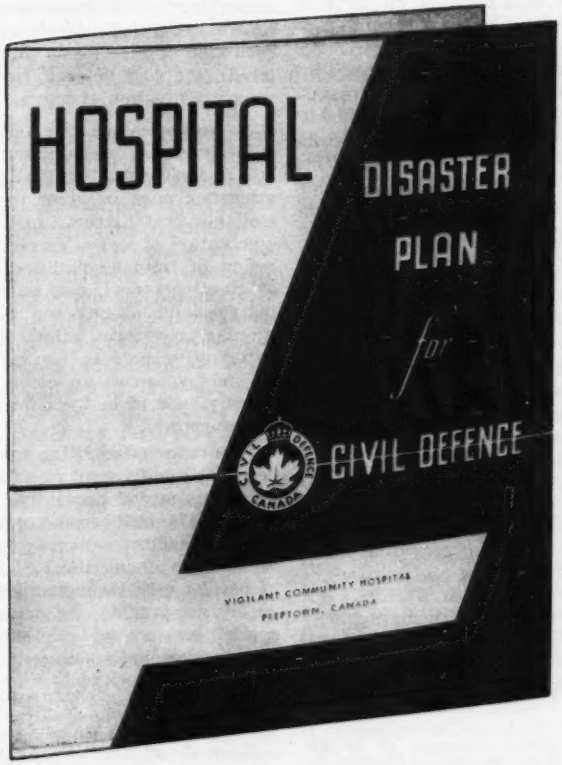
The first move is to organize a Civil Defence Committee for your hospital. Ask your Board to appoint one of its members to chair the committee. He will keep the Board informed on the developments of your disaster plan and his presence will give the committee a greater degree of authority. Subcommittees of the parent committee may be set up to carry out the various surveys and then to come up with a plan for the area or function assigned to them. These separate plans can then be co-ordinated into an overall plan, at subsequent full committee meetings.

To achieve some standardization in disaster planning, the Civil Defence Manual, No. 12, entitled *Hospital Services and Casualty Records*, should be consulted frequently. A good deal of research went into this booklet to make it a useful guide. It should be circulated freely among the executive and medical staff so that they may attain a more exact understanding of the hospital's role in civil defence. Copies of the manual are available from your local Director of Civil Defence Health Services or from the provincial office.

Where there are several hospitals in a community, it is most important that the local Director of Health Services arrange an early meeting with representatives of these institutions. Only in this way will it be possible to sort out community resources and to make clear-cut assignments. This is particularly true for medical and nursing staffs but will extend to personnel in other categories. It will also encourage the organization of joint training programs for volunteers, nurses' aides, first aid workers, stretcher bearers, et cetera.

More questions will arise as the local organization develops. The answers to some of the questions will be evident when the hospital's role in civil defence is more clearly understood. For some of the more difficult problems, consult your local civil defence authorities who may, in their turn, obtain information from a higher level.

Our hospitals have a key responsibility in our peace-time community health services. In the event of an unfriendly attack on our centres of population, their role will enlarge in proportion to the size of the disaster. The success of our defence service will depend directly upon our state of preparedness.



Cover of "kit" is in brilliant yellow and royal blue.

Industrial Cost Methods Can Help the Administrator

Calculating the Answer

David H. Spanier,
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HOSPITALS, for the most part, have not installed systems of cost accounting. Many are satisfied when they can obtain from their general records the cost of operation per patient-day. Others, and they represent too small a percentage of the total number of hospitals on this continent, allocate direct and indirect costs on a functional or a departmental basis. None, to my knowledge, use a cost accounting system which will provide "unit costs" equivalent to "unit product costs" in manufacturing concerns. Perhaps it may not be feasible to obtain unit costs of all services but so long as those hospital services, other than bed, board and routine services, are performed by separate departments and are separately priced, is it not reasonable to assume that separate costs should be computed for them?

The purposes of obtaining unit costs are these: (a) for effective management control, (b) as an aid in determining policies, (c) to reduce to the minimum spoilage, waste, and loss, (d) to improve methods, techniques, and procedures, (e) to conserve resources, (f) to provide better patient care at no increase in costs, and (g) to permit adjustments of rates of hospital services on the basis of the cost of furnishing them. I shall try to point out the ways whereby hospitals may utilize cost data not only for purposes of analyzing costs but also for providing sound bases for making cost analyses of services and "product" costs, similar to that done by manufacturing concerns. In hospitals, service costs would be determined separately for each type of service performed, such as, laboratory examination, minor operation, major operation, basal metabolism test, physical therapy treatment, delivery, prescription (compounded or purchased), nursing service hour or day, et cetera. Product costs would be determined for the cost per x-ray (a separate cost to be determined for each different size and type of x-ray), the cost of each administration of anaesthesia (a separate cost to be developed for each kind of anaesthesia administered), the cost of each fluoroscopic examination, et cetera.

An address presented at the accounting section, Ontario Hospital Association convention, Oct., 1951.

Cost Accounting and Cost Analysis

Preliminary considerations. For cost analysis to be justified, consideration must be given to controllable cost factors, such as: elimination of waste; careful selection of trained, qualified, and efficient personnel; good purchasing, receiving, storing, and requisitioning procedures; effective administrative policies for making all employees cost-conscious; and effective use of budgets for control purposes.

Failure to control rising hospital costs. This will result in patients deferring needed preventive hospital care if costs become prohibitive. This failure may prevent hospitals from giving the best type of patient care through their inability to provide the required special services and equipment; and the hospital's ability to discharge its responsibility to the community may be greatly lessened.

General administrative problems. The measure of a hospital's success is directly proportionate to the degree of patient care given. Hospitals can provide better patient care and can function better if they are based on a strong fiscal structure, have sound fiscal policies, and are efficiently managed. Hospitals should have adequate accounting systems based on uniform classification of accounts for hospitals, and should utilize budgets for administrative and control purposes.

Accounting problems. Unlike commercial enterprises, all income can not be used for operating purposes. Therefore, there should be a complete segregation of income and principal. Assets can be segregated by funds and the use of fund accounting procedures. The fund accounts of hospitals must be defined.

The need for analyzing costs. To stem the tide of rising costs, it is essential that there be accounting control over functional unit costs. This analysis is necessary to provide adequate patient care as economically as possible, and to assist in the preparation of a practical working budget.

Adapting Reports to Administrative Needs

The prime objective of cost and operating reports is to furnish the maximum amount of information from both the operating and cost angles for facilitating effective supervision and control, for attaining high standards of efficiency, and for determining policies at top management level.

Hospital accountants who are called upon to prepare operating and cost reports will be able to do a better job if they take the time to find out, first, who will use the report, what he needs to know plus what he had indicated that he would like to know about the hospital's operations and costs. The adoption or installation of costing methods must be geared to the kind of reports desired if optimum utilization is to be made of operating and cost data.

Cost and operating reports prepared for department heads should contain information related to matters with which they are in daily contact, for which they are responsible, and over

COST ANALYSIS METHOD NO. 1

The Blank Hospital For The Six Months Ended June 30, 1950

Description	Direct Expenses	I.P. Routine Services	Operating Room	X-Ray	Labor-atory	O.P. Routine Services	Basis of Apportionment
In-Patient Medical and Nursing	272,380	272,380					
Operating Room	55,000		55,000				
X-Ray	46,000			46,000			
Laboratory	45,000				45,000		
Out-Patient Direct Expense	7,500					7,500	
Administration	81,900	62,953	8,557	1,222	7,334	1,834	No. of Employees
Dietary	212,940	208,062	2,814	188	938	938	No. of Meals Served
Housekeeping	47,320	39,175	4,654	1,164	1,551	776	Square Ft. of Area
Laundry	29,660	28,382	1,042	47	47	142	Pounds of Laundry
Plant Operation and Maintenance	112,300	92,970	11,046	2,761	3,682	1,841	Square Ft. of Area
Total "Revenue-Producing" Department Costs	910,000	703,922	83,113	51,382	58,552	13,031	

Computation of Total In-Patient and Out-Patient Costs

"Revenue-Producing" Department Costs	Total I.P. & O.P.	Total I.P. Costs	Total O.P. Costs
In-Patient Routine Services	703,922	703,922	
Operating Room	83,113	83,113	
X-Ray	51,382	35,135	16,247
Laboratory	58,552	52,567	5,985
Out-Patient Routine Services	13,031	---	13,031
	910,000	874,737	35,263

No. of X-Rays: 8,650 I.P.,* 4,000 O.P.
No. of Exams: 32,850 I.P.,* 3,740 O.P.
I.P. days, 72,100, O.P. visits 7,500.

* Determined on basis of unit cost for each X-Ray and for each Laboratory Examination.

Cost Per In-Patient Day ($874,737 ÷ 72,100) = $ 12.13
Cost Per Out-Patient Visit ($35,263 ÷ 7,500) = 4.70

which they exert direct influence. Cost and operating reports prepared for the hospital administrator should contain information which will show the effectiveness of department heads in the several departments of the hospital. One of the functions of an administrator is to point out to the individuals in charge of various operations their points of inadequacy or failure and to inspire them to greater achievement. He should suggest specific methods of improvement but let the department head work out the details of the improved method which he is willing to adopt.

Cost and operating reports for governing boards of hospitals should be broad in scope but, as far as practicable, carefully summarized or condensed. A governing board, as you already know, is usually composed of busy professional and business men who, in order to evaluate properly the effectiveness and efficiency of hospital operations must adapt the organization to outside as well as internal conditions. It is important that they know what external forces are at work to direct better the affairs of the hospital. Because these men usually are occupied with their own outside business or professional interests, the time which they can and actually give to hospital affairs is very short indeed. To make the most of this time, it is necessary that they be given accurate current condensed reports showing the hospital's operating statement for a given period, current financial position, and comparative operating and cost data in language which laymen can understand. All unusual and non-recurring items should be fully explained, either as foot-notes in the report or in a separately prepared summary report of operations.

Cost Analysis Distinguished From Cost Control

Cost analysis for managerial control purposes may be defined as the comparison of actual with anticipated or predetermined costs, to determine what variations have occured, their extent and causes; to discover conditions underlying each cause, and to develop or revise policies, plans, methods, and practices for the purpose of eliminating unfavourable conditions, and to apply these procedures to situations requiring improvement.

Another type of analysis consists of breaking up accounts and figures into their component elements. This type of analysis is often useful in furnishing detailed statistical information but unless it can be matched against a yardstick of predetermined costs it is not suitable for control purposes.

Cost control refers to those methods, records, and procedures, which have been initiated to guide and regulate the internal operations of a business. While control is a matter of executive action, such action should be based on information obtained by a process

of analysis. Hence analysis and control represent a cause and effect relationship.

Hospital Cost Analysis Methods

In analyzing hospital costs, the methods employed are more closely related to cost finding since that is the term which more properly identifies the accumulation of costs in the absence of a cost system. There are three so-called cost analysis methods which have been recognized in computing and accumulating hospital costs.

One such method is the government reimbursable cost formula. While not a cost analysis method in the same sense as are the other two methods it does provide for the separate computation of costs per patient-day for in-patients and out-patients. There are several variations of the method for computing costs under this formula.

Originally intended to furnish to federal agencies purchasing hospital care a basis for calculating reimbursable cost of in-patient service per diem and of an out-patient visit, it is now used by governmental units and others who provide hospital care on a reimbursable basis. One variation of the established formula is the allocation of general and service department expenses to the professional and routine service departments, separately for in-patients and out-patients. Such apportionments are made on the basis of the units of service furnished by the non-revenue producing departments to the revenue producing departments. This method is illustrated on the chart showing cost analysis method, No. 1.

This method, which is explained in the publication *Hospital Accounting and Statistics*, a manual for American hospitals published by the American Hospital Association in 1940, presupposes that the records of general accounts have been maintained on the basis of a uniform method of record-keeping. More than this, it presupposes that the uniform classification of accounts as shown in the manual (now superseded by the handbook on "Accounting Statistics and Business Office Proceedures for Hospitals") has been adopted or that a departmental breakdown of expenses has been recorded substantially in accordance with the recommendations contained in the handbook.

The method as described in the 1940 publication of the American Hospital Association provides that an analysis be made of all operating expenses to show the proportions incurred on behalf of the various revenue producing hospital departments, such as room, board and routine service, x-ray, laboratory, operating room, et cetera.

It is a well recognized fact that there is no one formula that can be applied to the apportionment of all operating expenses. Some expenses can be apportioned according to the various services rendered for the different classes of patients or professional departments. In other cases it will be necessary to apportion costs on the basis of floor space, number of personnel days or other bases of apportionment.

Cost Analysis Method No. 1

On the chart showing the apportionment under Cost Analysis Method No. 1, it is contemplated that only the expenses directly chargeable to in-patient routine services are included under the in-patient medical and nursing account. It is assumed that all medical and nursing services rendered to other departments were correctly charged to those departments, such as operating room, x-ray, laboratory, et cetera.

In determining the unit cost of hospital service under this method, only the non-revenue producing departmental expenses were distributed to the revenue producing departments and such apportioned expenses when added to the direct expenses of the revenue producing departments reflect the total costs for each revenue producing department.

It will be noted from an examination of the chart that the expenses of the administration department were apportioned to the revenue producing departments on the basis of the number of employees in each of those departments. In the last column on the chart will be found the bases of apportionment for each of the non-revenue producing departments; for example, for dietary department it is the number of meals served, for the housekeeping department, the basis is the square feet of area, for the laundry department, the number of pounds of laundry and for plant operation and maintenance, the square feet of area.

When the total in-patient and out-patient cost for each of the revenue producing departments is determined under Cost Analysis Method No. 1, it is possible to readily obtain separate costs applicable to in-patients and to compute for out-patients only those costs attributable to the operation of the out-patient department, since the cost per patient-day is becoming to be a recognized unit by which hospital efficiency or progress is measured. However, it must be born in mind that such a figure can only be significant for those types of services which can be measured in terms of patient-days, that is, the in-patient routine services. The patient-day actually is irrelevant as a unit for measuring or determining costs of special professional service departments even though in the illustration given for Cost Analysis Method No. 1, the total in-patient costs are shown as the total of the costs of in-patient routine services, operating room, x-ray, and laboratory.

In order not to complicate the method of computing unit costs under Cost Analysis Method No. 1, the total in-patient cost was divided by the number of in-patient days to arrive at the cost per patient-day. In actual practice, a separate unit cost would have been determined for in-patient routine services. In the *Handbook on Accounting Statistics and Business Office Proceedures for Hospitals* it is stated that such service, while it varies among hospitals, usually includes as a minimum, in addition to room and board, routine nursing care and minor medical and surgical supplies.

Voici "CHAM" — Edition Française

Manuel de Comptabilité des Hôpitaux du Canada

LA publication d'octobre, 1951 de *The Canadian Hospital* annonçait la formation d'un comité pour l'étude et la publication de "CHAM", manuel de comptabilité, alors en préparation par les soins du Conseil des Hôpitaux du Canada. Celle de novembre vous donnait un bref aperçu de la réunion tenue à Montréal et vous apportait l'assurance que ce manuel serait publié en anglais et en français puisqu'il avait été conçu pour le bénéfice de toutes les institutions hospitalières du Canada.

Le manuel se divise en trois parties. La première partie étudie les principes de comptabilité appliqués aux hôpitaux, la deuxième suggère des méthodes pour l'application des principes, et la dernière complète le manuel en étudiant le prix de revient, la préparation du budget et la mécanisation de la comptabilité.

Tout le programme exposé en octobre, (voir *The Canadian Hospital*, octobre, page 41) pour l'avenir, est maintenant chose du passé. La première partie, en anglais, était expédiée au début de l'année et cette même partie, en français, est parvenue aux institutions françaises depuis la fin de janvier. La deuxième partie en français vous est peut-être déjà parvenue, sinon ce sera l'affaire de quelques jours. La dernière partie sera prête sous peu. Les mêmes progrès ont été réalisés pour l'édition anglaise.

Le Conseil des Hôpitaux du Canada s'était donné pour mission de fournir, gratuitement à tous les hôpitaux, un manuel favorisant l'uniformisation de la comptabilité et devant faciliter la préparation des rapports de statistiques exigés par les gouvernements fédéral et provinciaux. Nul doute que son emploi aidera à établir la situation financière des institutions, sur des bases plus solides et qu'il servira de barème à la générosité de ceux qui les soutiennent.

C'est en reconnaissance du dévouement inlassable de toutes les institutions de langue française de notre beau pays que le Conseil des Hôpitaux du Canada a fait préparer l'édition française. Ce geste gracieux, sans nul doute, sera grandement apprécié des administrateurs, économes, comptables et autres personnes préposées à la finance dans les hôpitaux.

Cours de Comptabilité

Afin de faciliter l'adoption de ce manuel par les Hôpitaux de langue française de la Province de Québec, le Comité des Hôpitaux du Québec, qui, depuis déjà quelques années, donne des cours de spécialisation, a jugé bon de consacrer cette année une quinzaine de jours soit du 10 au 22 mars inclusivement pour l'étude des principes et méthodes décrits dans le Manuel.

Ces cours seront donnés à Montréal et le coût d'inscription est de trente dollars. C'est certes un placement avantageux si on considère le but pour-suivit par les promoteurs de cette publication.

Les adhésions devraient être nombreuses de la part des personnes préposées spécialement à la comptabilité dans nos institutions hospitalières. Le Comité des Hôpitaux du Québec sera très heureux de recevoir vos demandes d'inscription.

La collaboration de tous est requise pour faire un franc succès de la belle initiative qu'a pris le Conseil des Hôpitaux du Canada en faisant paraître ce *Manuel de Comptabilité* et il vous sera agréable, je n'en doute pas, de la lui assurer, pleine et entière.— *P. E. Olivier.*

Having determined then the direct and apportioned expenses necessary for providing patient routine services it is then necessary to allocate properly the apportioned expenses to the special professional service departments, such as x-ray, operating room, laboratory, delivery room, et cetera.

It will be noted from the chart illustrating Cost Analysis Method No. 1 that out-patient department costs have been segregated and separate cost per out-patient visit determined from the total costs of out-patient routine services, x-ray and laboratory services furnished to out-patients.

Of course, it must be recognized that only average costs during a period can be determined under such methods. For example, the average cost does not reveal that at certain times of the day or month the operating room was extremely busy, at certain times idle and that some operations required three or four hours whereas others required but thirty minutes; that some required many assistants whereas others required but a few. An average figure however, such as is obtained under this method or any of the other methods which will be illustrated, serves as a basis for comparison of operating data for different periods of time and between different institutions. However, such comparison is worthless unless the average costs are calculated on a uniform basis. It is necessary that hospitals include and exclude the same types of expenses from their calculations.

In accordance with good ac-

(Concluded on page 99)

Admission et Départ du Patient

Part II

Condition de l'Entrée à l'Hôpital

Soeur Noémi de Montfort, F.D.L.S., I.E.,
Assistant-administratrice, Hôpital Sainte-Justine, Montréal, Québec

LA maladie étant l'essentielle et l'indiscrutable condition d'admission, la declaration du diagnostic doit être faite par le médecin traitant pour les cas privés; les cas publics sont ordinairement examinés aux cliniques externes par un résident; on réfère les cas irréguliers à l'autorité du directeur médical. Certains cas d'hospice doivent être refusés, encore faut-il le faire avec précaution, sans blesser. Il faut prendre le temps, ce qui semble manquer le plus à notre siècle de progrès; le temps de faire comprendre que l'hôpital soigne la maladie aiguë mais ne peut continuer la convalescence au risque de faire attendre des cas d'urgence.

Quand il s'agit de Retenir une Chambre

L'officière préposée à l'admission, à qui est confiée la disposition de tous les lits de l'hôpital, en exerce le contrôle au moyen d'un index mobile ou mural. Un index métallique contenant autant de compartiments que l'hôpital contient de lits est très effectif s'il est complété par les menus détails suivants: orientation de la chambre, nombre de fenêtres, bain, toilette, prix de la chambre, qui sont sur plan fixé au compartiment.

Dès l'admission du malade, une carte contenant: son nom, le numéro du lit, celui de l'hôpital, le nom du médecin traitant, la date d'entrée, est placée dans le compartiment correspondant au numéro de lits sur le tableau. Cet index montre alors en un coup d'oeil rapid, le nombre de lits occupés, vacants, réservés; chaque catégorie peut être représentée par un carton de coleur différente. L'inscription au registre des patients complète les formalités d'admission.

Toute demande de réservation, pour lit de chambre privée ou de salle, est adressée à ce bureau. L'inscription des lits réservés peut s'enregistre: en ordre chronologique; à la date promise; au nom du médecin traitant.

Vu les longues listes d'attentes et les refus inévitables, surtout de nos jours, cet enregistrement en triplicata rend de grands services pour exercer une juste distribution des lits disponibles. Il peut aussi servir de témoignage lorsqu'une personne assurée réclame un dédommagement auprès de sa compagnie d'assurance pour des soins qu'elle a dû recevoir à domicile, faute de place à l'hôpital.

Formalités Nécessaires à l'Admission

Les formules d'admission se ressemblent généralment quant à la partie qui intéresse la statistique et la finance; ces détails ennuyeux, il faut les faire connaître sans ennuyer le patient.

Celui-ci, ordinairement, ne s'objecte pas à payer une semaine de pension en entrant, c'est la coutume et c'est prudent, mais ce procédé ne doit pas être inflexible — et plus d'un patient ou son parent vous sait gré d'avoir laissé passer le premier moment d'angoisse avant de réclamer un acompte. Il y a deux phrases à bannir du questionnaire: "pouvez-vous payer?" "êtes-vous capable de payer une chambre privée?" Ne vaudrait-il pas mieux dire: "Désirez-vous une chambre privée?" Nous en avons de $7 à $10 par jour." La réaction du patient le fera vite classifier et de cette façon on peut reconnaître la personne de rang qui mérite des égards et à qui il ne faut pas présenter le compte hebdomadaire. Il appartient à l'officière de donner des instructions à la comptabilité à ce sujet; une indication très apparente est alors placée sur le compte, sous forme d'une large étampe, ce qui permet au comptable de les soustraire automatiquement des comptes à distribuer chaque semaine.

En général, la question à poser est celle-ci: qui se rend responsable du paiement? Si c'est une organisation, une assurance, le questionnaire est terminé dès que le numéro du contrat et la validité de la carte d'identification sont vérifiés. Si une tierce personne est nommée? On demande son degré de parenté et les questions se font plus nombreuses.

Si le patient ne peut rien payer, le cas est référé au service social à qui il appartient de faire le discernement des cas vraiment nécessiteux, mais l'admission du malade n'est pas retardée si le cas est urgent. Le service social, par ses enquêtes, tout en protégeant l'hôpital contre l'exploitation, procure aux indigents les moyens d'améliorer leurs conditions sociales ou autres, soit directement ou avec la collaboration des oeuvres.

Les détails inhérents à toute admission sont, brièvement: le nom, adresse, numéro de téléphone, nom du plus proche parent, adresse, téléphone, nom du père, de la mère, lieu de naissance, âge, sexe, race, lieu de naissance, état, religion, paroisse, occupation, nom de l'employeur, médecin qui recommande le cas, le médecin traitant, date d'entrée, l'heure, le mode: en civière, chaise roulante, ambulance admissions antérieures, diagnostic, personne responsable, et assurances.

Il importe de connaître la religion du malade. Par example: On transporte un homme à demi-conscient en ambulance; la religieuse demande à la dame qui

(Suite en page 76)

Présenté à l'Ecole d'Administration Hospitalière, Comité des Hôpitaux de Québec, Montréal, 1950.

Medical Services Advance

in a Middle Eastern State

SWIRLING desert sand, Arabs in flowing dress, and herds of goats are an appropriate introduction to life in Kuwait, a tiny Arab state of 150,000 inhabitants on the northwest coast of the Persian Gulf. Here, for over a thousand years, goats were the main-stay of the people, giving them the essentials of life—milk, meat, and clothing. Other means of earning a precarious and meagre livelihood in this territory, situated at the eastern extremity of the vast, arid desert of Arabia, were through dhow building, and pearl smuggling.

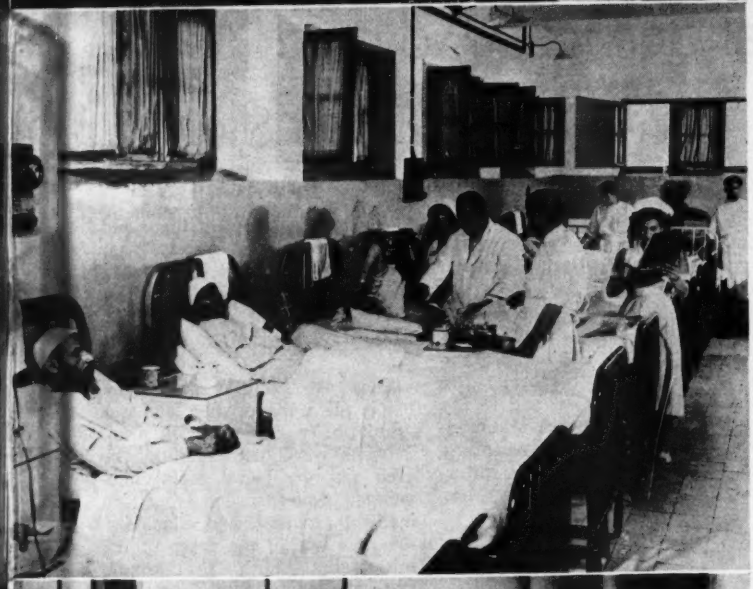
Thus, until recently, 95 per cent of the population suffered from trachoma, the dread eye disease of the desert, and 98 per cent from tuberculosis. Malnutrition was as widespread as in any country of Africa or Asia; illiteracy was nearly 100 per cent. There was no electric light and only brackish well water. What attempts there had once been made at road building had long since been obliterated by the ruthless encroachment of desert sand.

Then the familiar pattern of life in this impoverished land was dramatically disrupted. Rich oil deposits were discovered in the area and are being rapidly developed. Benefits, such as modern medical facilities, and education, are now within the grasp of the inhabitants. With the annual state income from oil increasing, the ruling Sheikh of Kuwait, H. H. Abdulla al Salem al Subah, has embarked upon an ambitious program of welfare schemes designed to help his people in their struggle against poverty, illiteracy, and disease.

The first step in the welfare program was the building and equipping of the new state hospital, one of the most modern of its kind in the Middle East. Built in the centre of town and overlooking the waterfront, it is equipped with a modern dispensary, laboratory, operating theatre, x-ray apparatus, and

Courtesy of the United Kingdom Information Office, Ottawa.

Beaming for the camera, this Bedouin leads a nomad-like existence, waging a constant fight for the bare essentials of life.



dental surgery. Its fame has spread far and wide. Patients flock into Kuwait from all over the Persian Gulf and from many parts of Arabia and they represent all classes—poor Bedouins from the desert, fishermen from the coastal villages, rich merchants, sheikhs, shop-keepers, and labourers. There are few more extraordinary scenes than this heterogenous crowd arriving in the great courtyard of the hospital. They come on foot, by donkey and camel, in dilapidated buses, and in the latest limousines of British and American make.

The medical staff is chiefly British, headed by Dr. E. Parry, F.R.C.S. He is assisted by an ophthalmologist, an anaesthetist, a dental surgeon, and a Palestinian specialist in pulmonary tuberculosis. General duty officers are mostly Arabs for it is the policy of the hospital to employ non-Arabs only when suitable Arab staff cannot be obtained. The majority of the nursing sisters are Palestinian Arabs but plans are well advanced to open a nursing school to train local girls.

A health committee, headed by the Minister of Health, Sheikh Nisf Yousef Nisf, has the responsibility of governing the hospital and they meet in conference with Dr. Parry once a week. The Minister of Health is responsible to the Sheikh of Kuwait who in turn is responsible to a Kuwait Committee composed of a council of ministers. Thus the vast income from oil is not administered solely by the Sheikh of Kuwait but by his Council all of whom receive salaries for their services from the state.

As with hospitals all over the world, the great problem in Kuwait is one of accommodation. At present men, women, and

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Above: The Kuwait health committee meets once a week with Dr. Parry, head of the medical staff.

Centre: A doctor examines patients suffering from tuberculosis, the most virulent disease in Kuwait.

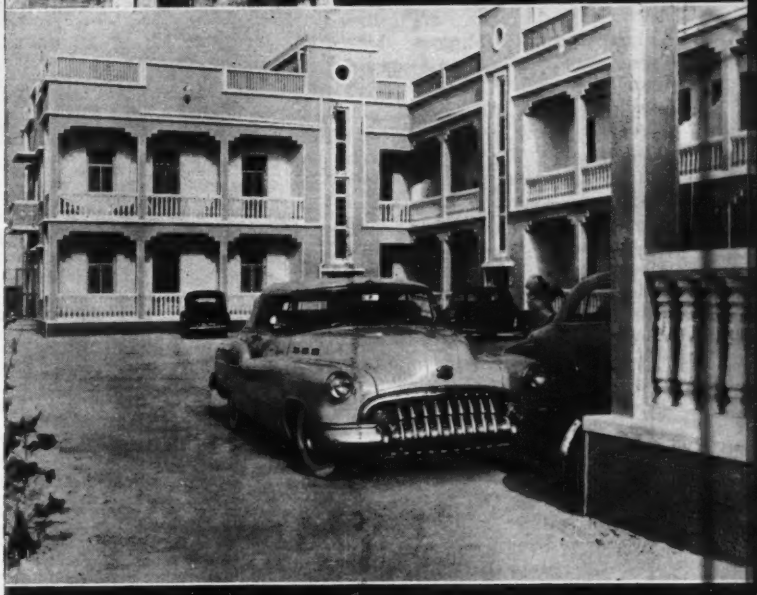
Below: A white-coated doctor strides through a group of black-veiled Arab women who have come to clinic with their children.

children, attend the same hospital but this is a difficult arrangement because of the age-old oriental custom of purdah. With patience and understanding, the medical staff are gaining the confidence of these women who for countless generations have been shut away behind purdah. At first diffident, they now come freely for treatment. To further remedy the situation, another building is being erected for them which will not only ensure better and more individual treatment but will also ease the pressure on the main wards. Arab designed and built, it is characterized by graceful arches, large, airy, wards, and equipment as modern as the main hospital.

Tuberculosis patients will also receive better facilities and acommodation in a modern, 200-bed sanitorium which is nearing completion. Tuberculosis, a very virulent disease in Kuwait, is most often caused by chronic malnutrition and lack of green foods. Many tuberculosis patients have never known a "square meal" before they came to hospital.

Arabs in outlying districts and in the distant reaches of the desert who are unable to make the journey to town have not been overlooked in the new health schemes. Medical treatment will be brought to them through a mobile clinic which will have its own x-ray equipment, operating table, and air-conditioning plant. It will be put into operation as soon as staff has been recruited.

Thus, the Kuwaiti, whoever he may be and wherever he may live, will soon be enjoying a health service undreamed of a few years ago.



Above: Framed in a graceful arch, this young Arab is working on the construction of a new clinic for women and children.

Centre: A large block of apartments, fitted with every convenience, has been built for the comfort and well-being of the nursing staff.

Below: In Kuwait, you can come to hospital in car, as shown here, or on camel or donkey if you prefer. The deep, spacious verandah of the building is invitingly cool in a country where 125° in the shade is an average temperature.

His Majesty King George VI

CANADA mourns the death of our late most gracious Sovereign, King George VI. The esteem in which he was held has been reflected in the genuine grief expressed by his peoples spread the world over.

In time of peril, his steadfast courage strengthened resoluteness of purpose throughout the Empire and the whole Commonwealth of Nations. His unshakable faith was exemplified in the words spoken by him in 1939 when, in a time of mortal danger, he sustained his people as no other could:

> "I said to the man who stood at the gate of the year: 'Give me a light that I may tread safely into the unknown' and he replied: 'Go out into the darkness and put your hand into the hand of God. That shall be to you better than a light and safer than the known way'."

The King's quotation ended at this point that Christmas day; but now, twelve years later, the lines by M. Louise Haskins may well be concluded:

> "So I went forth and finding the hand of God trod gladly into the night. And He led me toward the hills and the breaking of the day in the lone East."

Losing one well loved and trusted Monarch, the peoples of the British Commonwealth have gained another, equally loved and equally respected.

GOD SAVE THE QUEEN

Epidemiology in General Hospitals

Part II—Isolation Procedures

A. C. McGugan, M.D.,
Superintendent,
University of Alberta Hospital,
Edmonton, Alberta.

A PRE-REQUISITE for the management of communicable conditions in general hospitals is absolute scientific honesty. The "it can't happen in our hospital" attitude is dangerous and the "ostrich" approach to an established hospital infection, wherein the administrator buries his head in the sands of denial and rationalization, is to be deplored.

Admission of Communicable Diseases

"All the days wherein the plague (leprosy) shall be in him he shall be defiled; he is unclean: he shall dwell alone; without the camp shall his habitations be." (*Leviticus* 14-46).

The above "law" is attributed to the period about 1490 B.C. It has taken over 3,400 years for man's viewpoint regarding geographic isolation of communicable diseases to change materially. Today it is considered permissible to hospitalize Hansen's disease (leprosy) in an open ward provided that "hand-washing" and "gowning" is adequate. In general, communicable diseases are admitted to hospitals other than isolation hospitals either wittingly or unwittingly. A number of factors will determine whether or not a patient known to have a communicable disease in a contagious or infectious form will be admitted to a general hospital. Some of these are:

The availability of an isolation hospital in the community;

The availability of separate rooms and cubicles in the general hospital concerned;

The availability of staff adequately trained in isolation technique;

The attitude of the community regarding the matter of physical and geographic isolation.

The public relations angle of the question of admitting or retaining communicable disease cases in a general hospital is an important one. It is true that the hospital administrator must expect to participate in an educational program to remove public prejudice concerning the admission of communicable disease cases to general hospitals. However, it takes courage to do so on the part of the administrator when he realizes, as any experienced administrator must, that in admitting communicable diseases to his general hospital he is increasing the "litigation hazard" in the hospital. To the public any communicable disease case or infection developing during the period of a patient's hospitalization is the result of a cross-infection and evidence of negligence on the part of the hospital staff; and the courts appear to be quite sympathetic to the public's point of view in this respect.

Many cases of diseases in a communicable stage, either in the incubation, prodromal or acute periods, are admitted to general hospitals unwittingly. The number might be reduced by taking a pre-admission history to reveal a history of exposure and by making a careful pre-admission examination preferably in the patient's home or, failing this, in the hospital admitting unit.

Provided that the home-nursing situation is adequate, smallpox cases should be cared for either at home or in an isolation hospital. Uncomplicated cases of measles (either rubella or morbilli), and chickenpox also should be isolated at home.

Training Staff

In thinking of the training of staff, both for the protection of their environment and their own protection, one must consider the training of the entire staff and not only those who may be in direct attendance on patients. Each member of the staff, from the janitors to the doctors on the medical staff, should be expected to collaborate fully in our attempt to prevent hospital infections and cross-infections. Food handlers and dish washers should realize that a single case of diarrhoea may spread infection throughout the hospital. The combination of a pustular lesion containing toxin producing strains of staphylococci on a baker's hand and the preparation of cream confections may result in a food poisoning outbreak among the staff and patients. The presence in the nursery of a nurse or attendant with pustular acne may result in the death of a number of infants. Staff with pustular lesions such as carbuncles and boils should be excluded from work until cured. It must be remembered that visitors constitute a fruitful source of hospital infection. Visitors should be allowed to visit only if the isolated patient is not expected to survive.

Learning the fundamentals of isolation technique is relatively simple. Putting into practice what one has learned is tedious and time-consuming. Very few breaks in technique occur as a result of ignorance. Most of them occur as a result of carelessness. Certain simple procedures, such as the following, can and should be mastered by all members of the staff.

Gowns

Gowns are indicated for those members of the staff in attendance on known infectious or contagious cases, obstetrical cases, and in-

A Digest of Pertinent Data

Key:

†. . . . . Yes
—. . . . . No
?. . . . . Unknown

P. . . . . Pulmonary
V. . . . . Insect Vectors
M. . . . . Insects as Mechanical Carriers

O. . . . . Admission not recommended
R. . . . . Isolation in Room
C. . . . . " " Cubicle
W. . . . . " " Ward.

Disease	Aetiologic Agent	Route of Infection						Source		Transmission					Incubation Period	Communicability
		Egress			Ingress											
		Exhalation	Excreta	Exanthem	Inoculation	Ingestion	Inhalation	Man	Animal Reservoir	Soil-Air	Water-Food-Milk	Insects	Hair-Wool	Excretion-Secretion		
W—Actinomycosis	Actinomycosis bovis				†	†		?	†		†				?	As long as open lesion exists.
C—Anthrax	Bacillus anthracis		†		†	†	†		†	†	†		†		P 1 day 2-7 days	Spore bearer. Spores may live for months.
W—Round Worm	Ascaris lumbricoides		†			†		†		†	†				2 months	As long as ova survives.
W—Brucellosis (Undulant Fever)	Brucella Abortus		†		†	†			†		†				14 days	Not communicable from man to man.
W—Chancroid	Ducrey bacillus				†			†						†	3-5 days	As long as Ducrey bacillus persists.
O—Chickenpox (Varicella)	Virus	†		†			†	†		†					10-14 days	Readily communicable in early stages of eruption.
O—Common Cold	Viruses	†					†	†		†				†	1-3 days	Early stages—2-4 days.
W—Conjunctivitis (New Born)	Many Bacteria and Virus				†			†				M		†	3-4 days	As long as infectious discharges remain.
R—Diarrhoea (New Born)	Unknown		†			†		†			†	M			2-7 days	As long as symptoms persist.
R—Diphtheria	Corynebacterium diphtheriae	†					†	†		†	†				2-5 days	Until virulent bacilli have disappeared.
C—Dysentry, Amoebic	Endamoeba histolytica		†			†		†			†				3-4 weeks	As long as Endamoeba histolytica exists.
C—Dysentry, Bacillary	Shigella-Sonne flexnershiga		†			†		†			†	M			1-7 days	As long as micro organism is excreted.
C—Hydatid Disease	Ova of Toenia Echinococcus		†			†		?	†		†		†		Months to years	As long as dog is infected.
R—Encephalitis Lethargica	?	?					?	?	† ?						?	?
R—Encephalitidies Anthropod-borne virus	Viruses (several)	?			†		?	?	†			†			5-15 days	Not known.
W—Enterobiasis (Pinworm)	Enterobius Vermicularis		†			†		†			†				14-21 days	As long as ova are excreted.
W—Food Poisoning	Staphylococcic Toxin of	†				†		†			†			†	½-4 hours	A poisoning.
W—Food Poisoning (Botulism)	Clostridium Botulinum Toxin of		†			†				†	†				12-18 hours	A poisoning.
W—Gonorrhoea	Gonococcus				†			†						†	3-5 days	As long as gonococcus persists.
C—Hepatitis (Infectious)	Virus	†	†			†					†				1 month	1 week.
C—Impetigo Contagiosa	Staphylococci and Streptococci	†			†			†						†	2-5 days	While lesion remains unhealed.

															1-3 days	Prodromal and Febrile stages.
W—Leprosy (Hansen's Disease)	Mycobacterium leprae				†			†						†	1 to many years	As long as bacillus is present.
C—Lymphocytic Chorio-Meningitis	Virus	†	†			†		—	†		†	†			7-14 days	Infected mice carry virus throughout life.
W—Malaria	Several species of plasmodia				†			†				V			2 weeks	As long as the sexual form of plasmodium remains in blood.
O—Measles (Morbilli)	Virus	†					—			†					10 days	Prodromal and early exanthem—9 days.
R—Meningitis Meningococcal	Meningococcus	†					—	†		†						
C—Infectious Mononucleosis	Unkown	†					—	†			Unkn	own			1-2 weeks	Unknown.
R—Mumps	Virus	†					†	†		†					18 days	Prodromal and acute stages.
C—Paratyphoid Fever	Salmonella paratyphi A.B.C.		†			†		†			†	†			1-10 days	As long as bacilli appear in excreta.
R—Pertussis (Whooping Cough)	Hemophilis pertussis	†					†	†		†					7-14 days	Prodromal and catarrhal—about 3 weeks.
R—Pneumonias	Pneumonococci and many bacteria — also viruses	†					†	†		†					1-3 days	Unkown. Presumably until oral and nasal discharges are clear of infective organism.
R—Poliomyelitis	Virus—at least three types	†	†			†	†	†		†	†	†			1-2 weeks	Unknown. Apparently last week of incubation and first week of disease.
W—Rocky Mountain Spotted Fever	Rickettsia rickettsi				†				†			†			3-10 days	Not communicable from man to man.
O—Rubella (German Measles)	Virus	†					†	†		†				†	18 days	One week from onset of catarrhal symptoms.
O—Smallpox, Variola	Virus	†		†	†		†	†		†				†	7-16 days ave. 12	From appearance of febrile onset to disappearance of crusts.
R—Streptococcal Infections, Haemolytic pathogens	Group A Haemolytic Streptococci	†		†	†	†	†	†	†	†	†	M		†	1-7 days	As long as infective organisms are present in infected areas.
R—Staphylococcal Infections	Many variants of pathogenic staphylococci	†			†	†	†	†		†	†	M		†	1-7 days	As long as pathogenic staphylococci are present in infected areas.
W—Syphilis	Treponema pallidum		†		†			†						†	10-90 days	Short in treated cases prolonged for years in untreated cases.
R or C—Tetanus	Clostridium tetani		†		†			†	†	†					1-3 weeks	As long as bacilli live (spores) and can find a deep wound.
W—Trachoma	Virus				†			†						†	5-12 days	As long as lesions remain active.
W—Trichinosis	Trichinella spiralis		†			†			†		†				9 days	From animal to animal and animal to man.
R—Tuberculosis Pulmonary	Mycobacterium tuberculosis	†	†			†	†	†						†	1 to several months	As long as tubercle bacillus is discharged.
C—Tuberculosis (All other types)	Tubercle bacillus human and bovine	†	†		†	†	†	†	†	†	†			†	Unknown	As long as tubercle bacilli exist.
W—Tularemia	Pasteurella tularensis				†	† ?			†		†	† M V			1-10 days	Not communicable from man to man.
R—Typhoid Fever	Salmonella typhosa		†			†		†		†	†	M		†	7-14 days	As long as typhoid bacilli are excreted.
R—Vulvovaginitis in Children	Many organisms including gonococcus				†			†						†	Variable	As long as aetiologic agent is present in discharges.
W—Yellow Fever	Virus				†			†	†			V			3-6 days	Only important here because of aeroplane traffic.

fants. In the children's ward, visitors should be required to wear gowns. It is recommended that a clean gown be used on each occasion when an attendant cares for a patient. Repeated use of gowns by the same or several workers makes it very difficult to avoid contamination. If gowns must be worn repeatedly, standard nursing technique in the matter of donning and removing gowns should be strictly observed.

Hand Washing

Hand washing is the most effective single means of preventing the spread of infection. Those who are in constant attendance on infectious cases must learn to preserve the skin on their hands intact. Excoriated skin is a menace. Except in operating rooms, surgical scrubbing with a stiff brush is not recommended for those who must scrub frequently. Some of the newer detergents, particularly those containing hexachlorophene, are superior and more rapid in action than the usual neutral soaps. Some individuals are sensitive to detergents and neutral soaps generally. One should use rotary friction in washing and spend four minutes (by the clock) in successive soaping and rinsing with running water. Meticulous cleaning of the nails, cuticle, margins and spaces between the fingers about half-way through the scrubbing process is indicated. A foot-pedal type of scrub basin is recommended.

Masks

(Gauze—mesh 42 x 42 threads per square inch.)

Masking may be a valuable means of preventing the spread of droplet infections. Careless masking is a snare and a delusion. The mask that is wet is a menace. Carrying masks in pockets or using them as necklaces when one is not in direct attendance on patients are dangerous practices. Wearing glasses is an added protection against droplet infections as glasses prevent ingress of droplet infection by the conjunctival sac-nasopharyngeal route. Explosive expirations including talking, coughing, and sneezing add to the droplet - borne - infection hazard. Talking while operating or doing a dressing should be reduced to the absolute minimum necessary for the operative procedure.

Concurrent Safeguards

Room

Remove all furnishings which cannot be cleaned readily, such as upholstered chairs, dresser covers, table covers, curtains, et cetera, before the patient is admitted. Avoid dry dusting and sweeping. Oil floors—one gallon per 1,000 square feet. Impregnate blankets, bedclothes and patient's gowns with mineral-oil-in-water commercial preparation. Damp-dust furniture with an oily solution. Wash metallic surfaces with soap and water. Avoid the "toreador" method of whipping bedclothes when removing bed linen. Handle bed linen gently. Isolate patients geographically to the greatest degree possible.

Secretions and Excretions

Incineration is the most effective method of safeguarding secretions and excretions.

Nasopharyngeal discharges and sputum

Paper bags and paper tissues as well as sputum cups should be provided and the patient instructed fully in their use. Some absorbing material such as saw-dust should be used in sputum cups. Tissues and cups should be collected frequently in paper bags which should be closed and placed in a special metal container. The contaminated tissues and sputum cups should be destroyed by incineration.

Stools from cases of typhoid fever, infectious diarrhoea, infectious jaundice and poliomyelitis may be broken up and covered with a five per cent solution of chlorinated lime. Urine may also be added to this solution. Stools and urine should stand in this solution for at least one hour before disposal. Vomitus and food wastes should be treated similarly. Bed pans should be cleaned and sterilized or provision for boiling the bed pans should be made in the utility room. Dressings, swabs, tongue blades, et cetera, should be collected in paper bags and destroyed by burning. Dishes, trays, et cetera, when scraped, should be placed in the dishwasher-sterilizer or a covered kettle to boil for five minutes. All dishes should be kept on separate isolation technique. Paper dishes which may be destroyed by incineration justify their added cost.

Linen

Linen from communicable disease cases may be collected in pillow cases or rolled in bundles and placed in the communicable disease laundry bag in a special conveyor which is brought to the door of the patient's room for that purpose. All linen used by patients being treated for diseases caused by spore-bearers (anthrax, tetanus, gas gangrene) should be sterilized by steam under pressure before being sent to the general laundry. Laundering process of the modern laundry will safeguard all other types of laundry. Every effort should be made to immunize laundry workers against communicable diseases

(Concluded on page 100)

Summer Sessions — C.H.C. Extension Course

Arrangements have been completed to hold the 1952 summer sessions of the C.H.C. extension course in hospital organization and management as follows: Eastern Canada—Queen's University, Kingston, Ont., June 2-27; Western Canada—Regina College, Regina, Sask., July 14-Aug. 8.

Those who wish to be considered for the 1952 class which commences next September are reminded that March 31st is the closing date for applications.

For information concerning the extension course write to: Secretary, Committee on Education, Canadian Hospital Council, 280 Bloor St. W., Toronto 5, Ont.

The Mortar Between the Bricks

P. W. Dawson,
Associate Director,
Manitoba Hospital Service Association,
Winnipeg, Man.

CREDIT is the peculiar mark of the twentieth century economic system we refer to as "free enterprise". Credit created the kind of mass demand for goods and services which made possible our large scale production. Never before in history has there existed such a demand for goods and never in history has production reached its present heights.

More people today want more medical care and more hospital care than ever before. This demand is ever on the increase due to the advances of modern medicine in knowledge, technique, and equipment as well as the individual's recognition that good health is essential to economic and social security.

Where the business man created the mass demand for his goods and services by the device of large scale consumer credit, the doctors and hospitals suddenly found themselves faced with a mass demand, independently created, which threatened them with a revolutionary change unless they found the large scale means of financing it.

In this situation, the doctors and hospitals followed the lead of the business man. They created credit to finance the payment of the doctor's bill and the hospital bill. It will be noted that the process was inverted. The business man created credit to produce the demand for his goods and services; the doctors and hospitals, faced with the demand, created credit to finance it.

Credit is created in two ways: (1) by advancing goods and services against future earnings (2) by payment out of current earnings against future needs. The one is post-payment, the other pre-payment. The former is the method of credit-creation followed by the business man; the latter that adopted by the doctors and hospitals.

The difference in method in no way alters the sameness of the operation. The business man is interested in selling his goods, the financing is therefore made a part of the sale, and he gives us the goods. The hospital is interested in selling its services, the financing is therefore made a part of the sale and it gives us the services. The first takes on aspects of banking and the second of insurance. The business man is not interested in banking as such, nor the hospital in insurance as such. Each is concerned only with financing the sale.

Historically, hospital administrators moved first. In 1929 Dr. Kimball, superintendent of Baylor University Hospital, offered to provide the school teachers of Dallas with 21 days of hospital care for $3.00 a semester. This is usually accepted as the starting point of the pre-payment plans for hospital care which, under the aegis of the American Hospital Association, developed into the Blue Cross Plans which today provide essential hospital care to over 41,000,000 persons in Canada and the United States.

During the war years, medically-sponsored plans were similarly organized to prepay doctors' bills and these today protect 19,000,000 persons.

Blue Cross, then, is a credit operation that brings the Blue Cross member and the voluntary hospital into a direct buyer-seller relationship. The credit it provides can be realized only in terms of hospital service. The hospital contracts to provide the care when the subscriber, who has prepaid it, is in need of its services. Similarly, the medically-sponsored plans are to the medical profession what Blue Cross is to the hospitals.

When the department store gives us credit, we can select the goods we wish and pay for them on the terms arranged; but when the hospital furnishes its services a third party enters into the transaction. Neither the subscriber who has prepaid the care, nor the hospital which sells it determines what care shall be provided. This is within the judgment of the doctor. He decides when the care is needed, what services should be provided and when the need ceases. He is in effect the mortar between the bricks which holds the structure together.

Now, it must be noted, the care the hospital undertakes to provide is not an unlimited service. It is precisely defined in the agreement the subscriber enters into. As a practical consideration, his willingness to pay must be taken into account. He wants the care he is most likely to require when sick at a price which he thinks he can afford. The monthly subscription fee he pays therefore is calculated closely and the services he is to receive are as closely set forth.

Some will seek services in excess of entitlement. Many are predisposed to "getting something for nothing." Such traits make the role of the doctor difficult. When a subscriber is admitted to a hospital where he would not have been admitted had he not been a subscriber; when a subscriber is permitted to remain in the hospital a day after he is able to be discharged; when he receives services not consistent with the hospitalized illness or services which would not have been prescribed

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This article first appeared in the "Manitoba Medical Review", Oct., 1951.

were he paying cash at the time of treatment, he has no entitlement. He has prepaid only necessary care and treatment. Such unentitled services can be provided only at the expense of other subscribers. He has in effect defrauded the fund.

The doctors have the responsibility to prevent all such abuses. They assumed it voluntarily and properly. Their interest in the problem is a professional interest —it is also a selfish interest. Health is their business. Fundamental to the voluntary system of medical practice is the personal doctor — patient relationship. If this relationship is to be safeguarded, the final decision as to admittance to hospital, as to discharge, and as to prescription of service, must rest with the doctor.

This personal hospital-patient, doctor-patient relationship involving freedom of the patient to choose his hospital and his own doctor, and freedom of the doctor to practise his profession with no outside control or dictation, is the crux of the problem. Advocates of compulsory government financing of hospital and medical bills promise no interference between doctor and patient. Yet all doctors recognize that high quality hospital and medical care cannot be provided that way. The sole answer of the socialist to the problems of socialism is more socialism. Sooner or later, the government is compelled to take over the hospitals; when this is found to be no cure, then the doctors in turn become servants of the state. The sole alternative to socializing hospitals and doctors is the voluntary hospital-sponsored and doctor-sponsored Blue Cross and Blue Shield.

While it is true, therefore, that hospitals and doctors have a selfish interest in protecting Blue Cross and Blue Shield from the abuse that will mean failure, it is also true that their motivation is on a higher plane. Their interest in the welfare of their patients and in the standard of community health is a major factor.

Hospitals and doctors decided to guide their own prepayment plans, and to support and maintain them because (a) they want to be sure that the plans develop vigorously and single-mindedly to meet the problem of financing hospital and medical care for the population; (b) they want to be sure the high standards of hospital and medical care are safeguarded; (c) they want to be sure the benefits provided the people measure up to the minimum needs of realistic hospital and medical care.

As far back as 1935 when prepayment plans were in their very infancy, a committee of the Canadian Medical Association studied the problems involved. Its report makes interesting reading today both in respect to the recognition thus early of sound principles and of possible dangers which happily have been avoided. There is the implication, for instance, that some fear was felt that the final decision as to admission, discharge and prescription of services might not be left to the free judgment of the attending physician. This freedom of professional practice involved a responsibility to protect the fund against abuse which, under pressure from the patient, might be too lightly recognized in some quarters.

The committee therefore recommended:

> "Apparent undue hospitalization or unnecessary prolongation of such might best be handled by referring such cases to a committee of the medical staff of the hospital concerned or of the staffs of the combined hospitals, which committee would make its decisions or submit its advice to the executive body of the fund after consultation with the doctor in charge of the case."

This recommendation was never implemented in Manitoba, though in other areas medical advisory committees have been set up and have served with marked success in protecting the actuarial soundness of both Blue Cross and Blue Shield. The need for serious con-

(Concluded on page 98)

Patient's Goal Achieved Through Educational Program

Miss Pat Belanger, about to be discharged from the Toronto Hospital, Weston, Ont., is shown receiving a typewriting speed award from the superintendent of the sanatorium, Dr. C. A. Wicks. This attractive young patient was able to continue her studies under the direction of Miss Marjorie Hadley (middle) and is now ready to take her place in the business world.

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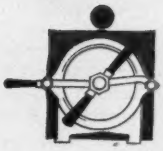

2. ***Withstands repeated sterilization:*** New Anacap Silk can be boiled or autoclaved *six separate times* without appreciable change in either strength or texture. In laboratory tests almost the full original strength is maintained even after 23½ hours of boiling.

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Food and Its Service

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(The following, Chapter 14 of "Good Food Makes Good Sense," is reprinted through the courtesy of the author and the publishers, McLelland and Stewart Limited, Toronto. This book also appears under the title, "Nutrition for To-day," see page 84.)

Meals for Nursing and Expectant Mothers

Elizabeth Chant Robertson, M.D., Ph.D.,
Nutrition Research Laboratory, Hospital for Sick Children, and Department of Paediatrics, University of Toronto, Toronto, Ont.

IT is not surprising that a mother requires more of the essential food factors when she is expecting a baby. Naturally her unborn baby is dependent upon her for all the many materials needed for building his body. We used to say that she had to "eat for two." Actually, the baby weighs so little, compared with her total weight, that she does not require much more in the way of total food or calories, but she does need extra generous amounts of the foods rich in complete proteins, vitamins, and minerals. Such foods also allow for the proper development of her breasts and uterus and make the successful breast-feeding of the baby more likely.

What evidence have we that well-fed expectant mothers come through this period more easily? Are their babies healthier and better developed? Many tests have shown convincingly that this is so. We will only describe two of them. The first one was carried out in Toronto by Drs. Ebbs, Scott, Tisdall, Bell and their associates from 1938 to 1941. In it, a large number of expectant mothers who were attending the out-patient obstetrical clinic of the Toronto General Hospital took part. They came into the study at least three months before their babies were due to arrive, and they were first asked to record in a special notebook all they ate in the next seven days, both at and between meals. They described the amounts of the various foods in terms of cupfuls, tablespoonfuls, servings, and so on. When this had been completed, each mother returned her record book and a dietitian checked it over with her carefully. It was then possible to divide the mothers into two groups — those eating poor meals and those eating good ones. Somewhat more than half of the mothers were on diets readily classified as poor. Other studies, carried out in Boston, Philadelphia, and elsewhere have shown at least as high a percentage of poor diets among pregnant clinic patients.

In the Toronto study, the mothers who were already eating "good" meals were given advice on how to improve them further, as practically none of the diets could be called excellent. In addition, approximately half of the mothers on the poor diets were given, free of cost, regular supplies of certain foods for the last three months of their pregnancies and for the first six weeks after their babies were born. This was made possible through the donation of a considerable sum of money by a public-spirited businessman, who remained anonymous.

What foods did each mother receive? They amounted to the following each day:

1½ pints of milk
1 ounce of cheddar cheese
1 egg
1 orange
4½ ounces canned tomatoes
2 tablespoons of wheat germ containing added iron
1 capsule of vitamin D (viosterol)

Why were these foods chosen? Of course the milk and cheese added generous amounts of calcium, riboflavin, and complete proteins to their meals, not to mention lesser amounts of many other factors. The egg added in particular more of the complete proteins and iron. The orange and tomatoes were especially useful for the vitamin C they provided. The special wheat germ added large amounts of the B vitamins and iron and of course the viosterol was used as a source of vitamin D. The mother provided her own meat, vegetables, cereals, bread and fats. In order to compensate for the psychological effect of the capsules the mothers who remained on their self-chosen poor diets were given similar capsules containing corn oil, which has no effect one way or the other.

The clinic doctors who examined and treated the mothers did not know which of them were receiving the free supplementary foods. Complete records were kept of the mother's condition both before the birth of her baby and for the first six weeks afterwards. The physicians found that the mothers receiving the extra food had far fewer complications such as anaemia, pre-eclampsia, threatened miscarriages, or pyelitis, during the latter part of their pregnancies. They also suffered from fewer complications while their babies were being born and during the next six weeks. At

birth their babies were no heavier, in fact they were slightly lighter than those of the mothers who remained on their usual poor diets. So far as the mothers themselves were concerned, the daily use of these excellent foods was a great advantage. It is also generally believed that poor meals during pregnancy affect the mother's health not only at that particular time but also later on in her life.

The mothers' better meals also improved their babies' chance of survival and gave them a better start in life. There were 210 mothers in this part of the study—120 of them eating their usual poor diets and 90 receiving the special food (see Table 1). Seventeen of these mothers lost their babies before they were six months old (see columns one and two in the chart). Three of the babies died of congenital malformations, or, in other words, they died because they were imperfectly developed. It is commonly believed that these malformations originate six or eight weeks after conception — that is, they had occurred long before the extra food was made available. Therefore, we can quite fairly omit the three babies that died as a result of these malformations. Apart from these, when you compare the first two groups of women you see that all the babies that died were the children of the women who remained on their poor diets. None of the mothers receiving the special food supplies lost their babies.

One of the physicians, a child specialist, kept health records of the babies during their first six months. He found that five times as many of the babies whose mothers remained on the poor diets developed pneumonia, bronchitis, ear infections, and frequent colds. The score for anaemia was three times as high in the "poor maternal diets" babies, and far more of them grew poorly (dystrophy). Many more of the mothers given the supplementary food were able to breast-feed their babies successfully. So good meals during pregnancy are a great advantage both to the mother and to her child.

Perhaps you noticed in Table 1 that the record for the original "Good" Diet Group (column three) was not as favourable as that of the "Special Food Supplied Group." This same difference was noted when the mothers' records were compared. There is a good explanation for this difference; the mothers receiving the special food were actually eating better meals. This would suggest that very definite advice to the mother as to the exact foods she should eat daily, and frequent enquiry to see that she is doing so, is more effective than general instructions on diet.

In Boston, extensive studies organized on a different plan have shown the benefit to the baby of good maternal meals during pregnancy. In this work, the kind of meals the mother was eating was ascertained in frequent interviews and by a study of the foods purchased. The babies were carefully examined by highly trained child specialists. In their first two weeks of life, the babies were graded as superior, good, fair, and poorest. The physicians found that all the superior infants, with one exception, were born to mothers who had eaten fair to excellent meals. In contrast to this, two-thirds of the babies born to the mothers who had taken poor or very poor diets were in the poorest classification. In fact all the stillborn babies, almost all those that died within a few days of birth, all the premature and immature babies and most of those with congenital abnormalities were the children of mothers eating poor or very poor meals. This work dispels any doubt as to the tremendous advantage to the baby of excellent prenatal diets.

It is now generally accepted that all expectant mothers should place themselves under the care of a physician as soon as possible and naturally they are eager to do all they can to give their babies a good start. Among other things, they want to know what foods they should eat. Such advice, adapted to fit their incomes, should be theirs for the asking. The diets outlined here apply when the mother's condition is normal.

The Food and Nutrition Board, N.R.C. (Washington) have published recommended daily dietary allowances for expectant and nursing mothers and the 1948 figures are shown on Table 2. For the sake of comparison the allow-

(Concluded on page 102)

Table 1

Infant Deaths

Mothers Diets	Poor Diet Group	Special Food Supplied Group	Original "Good" Diet Group
Total patients observed	120	90	170
Miscarriages	7	0	2
Stillbirths	4	0	1
Babies dying in first 6 months of life	3	0	0
Totals of above	14	0	3
Congenital Malformations	1	2	1

Table 2

Recommended Daily Dietary Allowances for a Non-Pregnant Sedentary Woman and for a Pregnant or Lactating Woman (1948)

	Sedentary Woman (non-pregnant)	Pregnancy (latter half)	Lactation
Calories	2000	2400	3000
Proteins (grams)	60	85	100
Calcium (grams)	1.0	1.5	2.0
Iron (milligrams)	12	15	15
Vitamin A (I.U.)	5000	6000	8000
Thiamine (mg.)	1.0	1.5	1.5
Riboflavin (mg.)	1.5	2.5	3.0
Niacin (Nicotinic Acid) (mg.)	10	15	15
Ascorbic Acid (mg.)	70	100	150
Vitamin D (I.U.)	?	400	400

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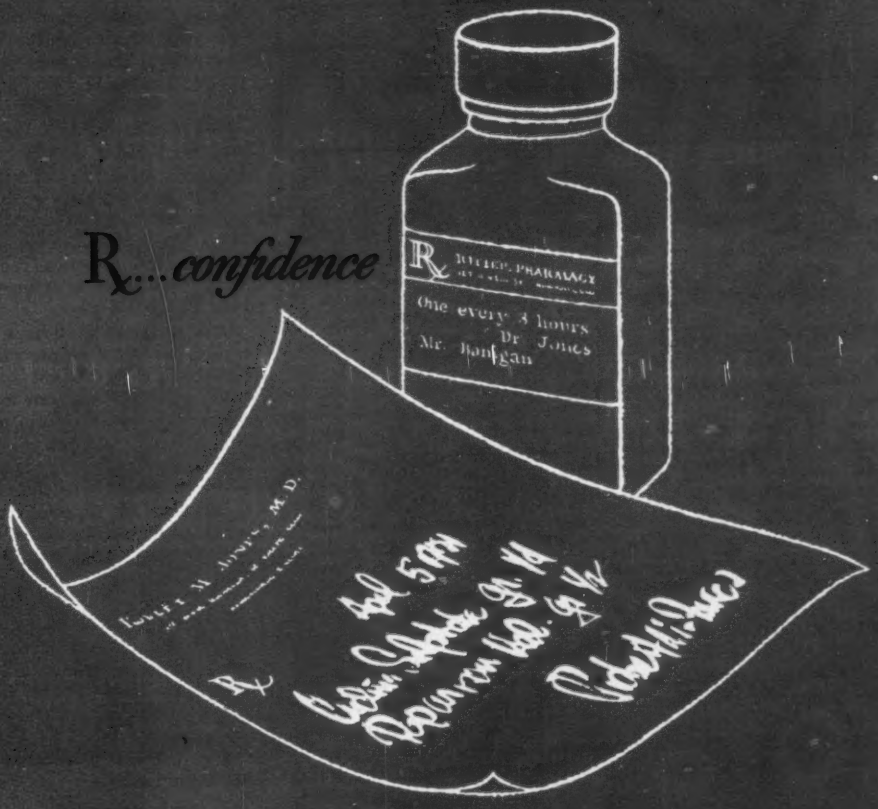

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Notes on Federal Grants

Construction

Federal health grants have been set aside to help meet the building costs of the nurses' residence at the Western Memorial Hospital, Corner Brook, Nfld., and to provide equipment for the new cottage hospitals at Fogo, Springdale, and Channel-Port aux Basques, also in Newfoundland. At Corner Brook, the old hospital is being converted into staff quarters and an addition is being built to house the nurses. The federal grant will be about $17,500. The equipment for the three cottage hospitals will furnish them with essential apparatus for the dispensary, examining room, laboratory, operating room, x-ray, obstetrical, and general medical services. Cost of the equipment for the Channel-Port aux Basques and the Springdale hospitals will be about $14,000 each and the Fogo hospital will receive $11,000.

The Rehabilitation Society, Inc., Sherbrooke, P.Q., has received a grant of $137,000 which will be applied to the Rockmount School in Sherbrooke and to two dormitories for boys in the Notre Dame du Lac section, which are operated by the Society. All three buildings are in use but part of the construction was completed after the federal health grants began in 1948; thus the grants cover this portion of the work. The Society operates a home for mentally deficient, crippled, and tuberculous children and for foundlings. More than 1,000 children per year are admitted for care, with about 500 a year being discharged as sufficiently recovered to take their places in the community. Elementary and trade schools for boys and girls are operated by the Society as well as two farms where the boys are instructed in agriculture.

The new Cloutier Hospital, Cap-de-la-Madeleine, P.Q., will receive $139,000 in federal grants. Built and operated by the Grey Nuns, the hospital has space for 102 active treatment beds, a 12-bassinet nursery, 21 beds for chronic patients, and medical, surgical, obstetrical, x-ray, and physiotherapy services. It is designed to serve Cap-de-la-Madeleine and the surrounding district in Champlain county.

A grant of $11,000 has been awarded to the new Reston Community Hospital, Reston, Man. The hospital has eight beds, a three-bassinet nursery, surgical and obstetrical services, and nurses' quarters. It will serve about 2,600 people in hospital district 10. The federal government is contributing more than $16,300 toward construction costs of a new building for the Rockwood-Stonewall medical nursing district in Manitoba. The building will have space for eight beds, a four-bassinet nursery, surgical services, offices for a physician and the local health unit, and living quarters for the nursing staff. Construction is scheduled for completion shortly.

The new Burnaby General Hospital, South Burnaby, B.C., has just been allotted $149,800 to help meet its building costs. Planned to serve about 60,000 people in the municipality of Burnaby, the hospital will have space for 122 beds; a 28-bassinet nursery with special facilities for the care of premature babies; medical, surgical and obstetrical services; physiotherapy, x-ray, and radiographic departments; a laboratory; and an out-patient department. Construction began in April 1951 and is expected to be completed early this spring.

Mental Health

Approximately half of the net cost of operating the new Ontario Hospital at Aurora and the new Ontario Hospital School at Smiths Falls will be met by the federal government. The Aurora hospital, opened in March, 1950, provides care for all patients. The Smiths Falls Hospital School, opened in January, 1951, is now accommodating 470 patients and will take in more as the wings of the new building are completed and ready for use. The federal government's share in the operating costs of the two hospitals is estimated at about $327,000 a year.

Arrangements have been made for the part-time employment of physicians and medical consultants to assist the full-time medical staffs of the Ontario Hospitals and the Toronto Psychiatric Hospitals. The physicians will perform routine examinations and hospital duties; the specialists will include psychiatrists, neurologists, opthalmologists, pathologists, radiologists, and dermatologists, who will be called in whenever their special skills are needed for the care of a patient. A paediatrician will act as a consultant on problems of child health for the Ontario Hospital Schools at Orillia and Smiths Falls. The cost of this project is estimated at $80,000 this year.

Professional Training

Seven bursaries for post-graduate training in nursing, surgery, and laboratory techniques have recently been awarded to residents of British Columbia and Alberta. Five awards go to nurses. Three of the nurses are from the Royal Alexandra Hospital, Edmonton; one is taking a year's training in the supervision of obstetrical nursing; another is taking a course in supervision in paediatric nursing; and the third nurse is taking a course in teaching and supervision of nurses. All three are enrolled at McGill University, Montreal. Also enrolled at the School for Graduate Nurses at McGill University is a nurse from the Vancouver General Hospital, Vancouver, B.C., who is taking a year's course in nursing administration. The fifth bursary goes to a nurse from Essondale, B.C., who is taking a six months' course in operating room techniques at the Vancouver

General Hospital. On completion of her course she will become assistant operating room supervisor at the Crease Clinic, Essondale.

The sixth bursary has been awarded to a staff member from the Royal Alexandra Hospital, Edmonton, for a short course in laboratory techniques at the Banting Institute, Toronto, Ont. A doctor from the Sanatorium at Tranquille, B.C., received the seventh bursary and is taking a year's training in general surgery at the Vancouver General Hospital.

To help provide larger numbers of highly qualified workers for growing health services, the federal government has just awarded nine more bursaries to residents of Manitoba and Saskatchewan for special training in various aspects of public health. Five awards have been given to nurses. Four nurses, all of Winnipeg, are enrolled in the public health nursing course at the University of Manitoba, Winnipeg. On completion of their courses they will return to public health work either with the provincial health department or the Winnipeg city health department. The fifth bursary was awarded to a nurse from Regina, Sask., who is taking a year's training in supervision in psychiatric nursing at McGill University, Montreal. She is expected to return to the staff of the Munro Wing of the Regina General Hospital, where she will assist in teaching student nurses.

The sixth bursary has been awarded to a speech therapist from Regina, Sask., to enable her to take a year's training in speech therapy at the graduate school of Brooklyn College, N.Y. She will return to the Cerebral Palsy Centre in Regina, on completion of her course, and will be qualified to teach other therapists.

In Manitoba, three awards have been made to doctors for short post-graduate courses. The pathologist at the Brandon Hospital for Mental Diseases, who is also director of the training school for laboratory technologists, is taking a six months' course in pathology at the Winnipeg General Hospital. Bursaries have also been approved for the superintendent and senior surgeon at the Manitoba Sanatorium, Ninette, to take a short course at the Tufts College Medical School, Boston, Mass., and for a Winnipeg doctor to take a month's course in bronchoscopy at the University of Illinois and St. Luke's Hospital, Chicago, Ill.

In New Brunswick, a bursary has been awarded to a resident of Saint John, for a three-year course in occupational therapy and physiotherapy at McGill University, Montreal. On completion of her course she will work in arthritis and rheumatism clinics in New Brunswick.

A staff nurse from the St. John's Sanatorium, St. John's, Nfld., has been awarded a bursary for a year's post-graduate training in medical and hospital techniques at the University of Toronto. Another bursary has been granted to a man from St. John's to take a year's post-graduate training in bacteriology at McGill University, Montreal. He will receive instruction in mycology, biochemistry, and clinical or hospital bacteriology. On his return to Newfoundland, he will rejoin the staff of the bacteriology division of the provincial health department's laboratory.

Public Health

In Nova Scotia, federal funds have been provided to cover the salary of a full-time nurse in the out-patient department of the Halifax Tuberculosis Hospital, Halifax. She will be responsible for keeping in touch with patients after their discharge from hospital as long as they require medical supervision. A grant is also being made toward the salary of a specially-trained nurse to do case room work and teaching at the Grace Maternity Hospital, Halifax, the obstetrical teaching hospital for Dalhousie University.

The federal government has earmarked health grants to help set up a new health unit for Jacques Cartier County, P.Q. It will serve the western end of Montreal Island from Ste. Anne de Bellevue to the Town of Mount Royal and from Lasalle to St. Raphael de l'Isle Bizard. This area has a total population of approximately 90,000. The unit, which is expected to be in operation this spring, will provide public health services, including a system of pre-natal and well-baby clinics and programs of immunization against such contagious diseases as diptheria and whooping cough.

The health unit will be staffed by 37 full-time or part-time employees. They will include four doctors trained in public health; 23 public health nurses; two sanitary inspectors; two dental hygienists; a dental technician; and three persons specializing in phases of tuberculosis control. Total cost of the health service is estimated at about $90,000 per year. Approximately half of this amount will be met by the federal government and the remainder by the provincial government and the municipalities receiving the service.

In Alberta, the federal government has agreed to underwrite 60 per cent of the cost of establishing public health nursing services at Winfield in the Wetaskiwin district and at Faust in the northwestern part of the province. The remainder of the cost will be met by the municipalities.

Winfield is a lumbering and farming community about 50 miles west of Wetaskiwin, its present source of medical and hospital services. The new nursing district will provide emergency treatment services and public health nursing for about 1,800 people. The federal grant assists in meeting the nurse's salary and the cost of the equipment for the public health office.

The Faust district, on the southern shore of Lesser Slave Lake, is about 40 miles from medical and hospital services. Emergency treatment and public health services are being provided by the municipal nurse stationed at Kinuso. She operates a general clinic at Faust once a week. The federal grant assists in providing the technical equipment for the health centre.

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Purposes and Aims of the

National Council of Hospital Auxiliaries of Canada

Mrs. O. W. Rhynas,
President,
The National Council of Hospital Auxiliaries of Canada,
Toronto, Ontario

THE National Council of Hospital Auxiliaries of Canada is the organization in this country of which all voluntary hospital auxiliaries are a part. The purpose of this new body (formed in 1951) is to acquire and provide a far-reaching knowledge of work being done by auxiliaries and to give impetus and guidance for further accomplishments.

There is no doubt that by a systematic interchange of speakers, interests, and ideas, greater benefits and understandings, to say nothing of friendships, will result. For, "in unity there is strength" and with this motto ever in mind, expansion and new ground-breaking will no doubt soon be accomplished when the integration of this Society is completed.

It is definitely believed that, with this new national status, closer contact will be made and maintained with all societies interested in advancing the health and welfare of Canadian citizens.

An endorsement of this forward movement in the voluntary hospital auxiliary set-up—to meet the ever growing demands and constantly changing world of hospitalization—is already in evidence. Through the eventual fulfilment of the aims of the National Council, every branch, large and small, will find, I am sure, the very quintessence of help, inspiration, and co-operation which will greatly advance hospital services in Canada. This, after all, is the reason for the existence of voluntary auxiliary effort.

The meeting held in Ottawa, May 29-30, 1951, in the Chateau Laurier, was the realization of many dreams and plans. Auxiliary representatives from several provinces were in attendance and it is the duty of this nucleus group to formulate plans and draw up a constitution. These plans, along with the constitution, will be presented, later, to a general conference, at which appointed representatives from each province will be present. All provincial representatives will participate in the election of officers and the appointment of an executive council.

The strength and progress of this organization depends upon the co-operation, knowledge, loyalty, and support of all members. In this way only will it be possible to achieve an ever-growing momentum in this new Canada-wide venture.

Mrs. O. W. Rhynas

Members of the Executive Council, pro tem, are: Mrs. Forbes Perkins, Vancouver; Mrs. Thomas J. Lytle, Toronto; Mrs. F. Cecil McDougall, Montreal; Mrs. Harold Wilkes Davis, Kingston, Ont.; Mrs. J. Milton George, Morden, Man.; Mrs. W. B. Frost, Melfort, Sask.; Mrs. W. P. Filmore, Winnipeg; Mrs. Claude R. Wilson, Vancouver; Miss Christina MacLeod, Winnipeg; Mrs. George W. Houston, Toronto; Mrs. James Ross, Truro, N.S.; Mrs. James D. Good, London, Ont.; Mrs. Ernest Haggerman, Saint John, N.B.; Mrs. John Oliver, Edmonton; Mrs. Alton Goldbloom, Montreal; Mrs. Oliver W. Rhynas, President, pro tem.

Aim of the Council

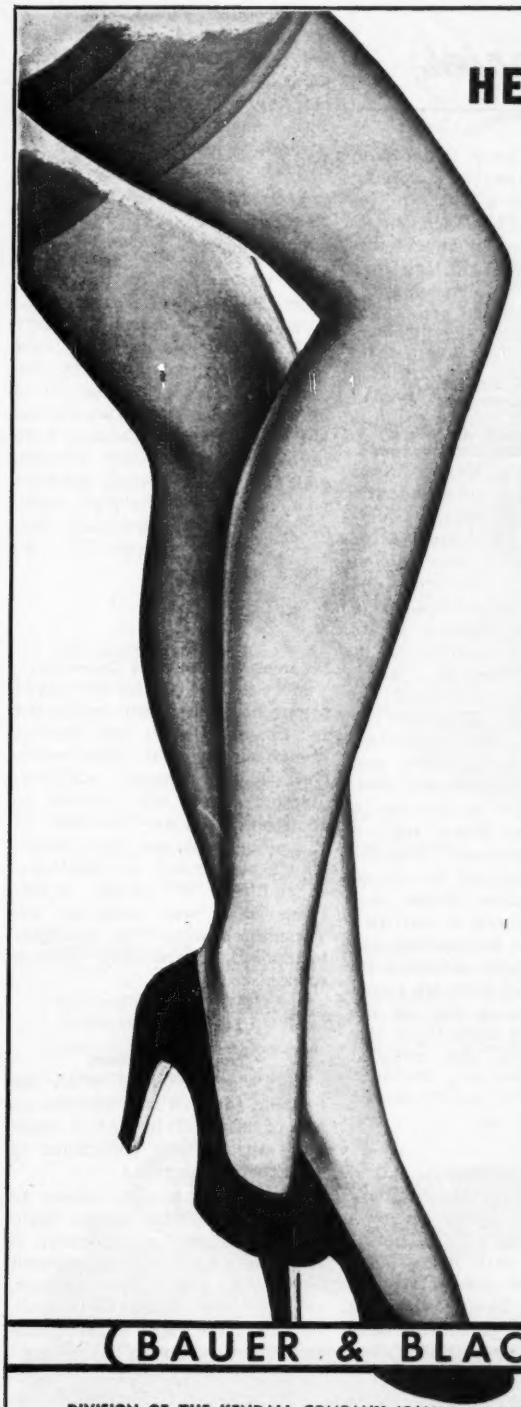
Nearly all hospital problems are the concern of the women's voluntary hospital auxiliaries. Therefore, it is the aim of the National Council to advance solutions, where possible, to problems of general concern. It is our hope that, to all interested societies from coast to coast, the Council will be a source of information and help.

It was Thomas Edison who said, "Spiritual power is the greatest undeveloped power and has the greatest future; the greatest discoveries will be along spiritual lines. This is the field where miracles are going to happen." There are miracles happening every day in our hospitals. The Great Physician leads the way. Our greatest concern is ministry to the sick, regardless of class or creed. It is our belief that, with the advancements in health education and medical treatment, the hospital of today will become the health centre of tomorrow.

We wish, at all times and under all circumstances, to advance the right ideas, the right persons in the right places, and to be in the right places at the right times when we are needed to do a job.

Success is a good thing. Wealth is good also. Honour is better. But best of all are justice and

(Concluded on page 92)



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With the Auxiliaries

Annual Meeting Held by Hospital Auxiliary Branch

The annual meeting of the Town of Mount Royal branch of the women's auxiliary to the Montreal General Hospital was held recently. Reports of the various committees indicated that the preceding year had been a busy and highly successful one. A net profit of $591.75 was realized from the fashion show, which is the branch's one money raising venture during the year. Volunteer workers in the library, snack bar, and travelling shop donated a total of 560 hours or an average of 62 hours a month. Supplies donated to the snack bar included 72 pies, 72 jars of jam and jelly, and several batches of cookies. In addition eight knitted baby jackets, two sun suits, one knitted bed jacket, and eight books were given to the Gift Shop. The sewing committee finished approximately 1,078 articles, including several pairs of children's pajamas and hospital gowns. A gift of $643 was given to the main branch of the auxiliary. During 1951, this branch auxiliary had a total membership of 256, an increase of 25 per cent over the previous year.

* * * *

Auxiliary at Vanderhoof, B.C., Reviews Active Year

An active year was reviewed in the annual report of the ladies' auxiliary to the Saint John Hospital, Vanderhoof, B.C. A special membership drive was held and the auxiliary now has a total membership of 207, which is double that of the previous year. Of this number there are 20 active members. Recently, the sum of $210 was realized from a very successful dance which was sponsored by the auxiliary. Donations and talent money were other means of revenue.

An incubator valued at $254.93 was purchased for the hospital and members have undertaken the further project of supplying the hospital with a Leitz Photrometer valued at $205. Each Christmas the auxiliary members distribute toys, fruit, and cigarettes to the patients. Total receipts for 1951 were $448.31 and total disbursements were $365.21.

* * * *

Children's Hospital Aid Society Makes Substantial Contributions

The Children's Hospital Aid Society recently presented the new Red Cross Crippled Children's Hospital, Calgary, Alta., with a $20,000 x-ray unit. During the past ten years, the society has contributed a total of $96,087 to the hospital. In addition to its regular monthly contribution of $660, for the upkeep of a ward, the society has purchased an elevator, valued at $22,800, for the new hospital; furnished two wards, at a cost of $6,000; and given $2,500 to the building fund.

Money is raised by the sale of the society's own Easter seals, a yearly tea, contests, bazaars, dances, dog shows, and the sale of programs at horse shows and rugby games. Funds to purchase the seals, stamps for mailing, and all other expenses involved by the sale of Easter seals are raised in various ways so that all the money collected from their sale is used directly for crippled children.

* * * *

Active Auxiliary at Nakusp, B.C.

Members of the ladies' auxiliary to the Arrow Lakes General Hospital, Nakusp, B.C., supply their hospital with home made jams, jellies, and pickles throughout the year. During the past year, they have given two beds, a chesterfield, two chairs, and a shower to the nurses' quarters. Money has also been donated to help toward the cost of shingling the hospital. Funds are raised through the sale of Christmas holly, Christmas cake raffle, monthly bake sales, a banquet, catering, and a Valentine dance. Two members visit hospital patients at least once a week.

* * * *

Auxiliary at Fernie, B.C. Does all Hospital Mending

All the mending for the Fernie Memorial Hospital, Fernie, B.C., is done by the ladies' auxiliary and, in addition, over 300 new articles were completed by the members. The Spring Tea netted almost $400 last year. Two electric kettles and two refrigerators were purchased for the diet kitchen, and an electric sewing machine was supplied for the work room. At Christmas the auxiliary provides all the flowers for the wards.

* * * *

Auxiliary at Winchester, Ont. Purchases Laboratory Equipment

More than $1,000 has been spent to purchase laboratory equipment for the Winchester and District Memorial Hospital, Winchester, Ont., by the women's auxiliary. Members have also decided to contribute toward the cost of changing the nurses' call system, which will entail an additional expenditure of nearly $1,000. Plans have been made by the Winchester unit of the auxiliary to sponsor a two-day cooking school.

Training Assistants

The wise executive is on the look-out for men who can relieve him of detail, fill in for him when he is absent, and contribute to constructive planning.

When a department ceases to function efficiently in the manager's absence, management is bad. Every head of a department ought to be able to leave his desk, even in times of crisis. If he can't, he hasn't the right kind of men working for him or he has kept them too much in leading strings. —*"Royal Bank of Canada Monthly Letter"*.

Provincial Notes

British Columbia

ROSSLAND. Plans for a two-storey addition to house a kitchen and laundry are being drawn up by architect Henry Whittaker, Victoria, for the Mater Misericordiae Hospital. The building, which will be a 45 by 57 foot structure, will be erected between the south wing and the nurses' home. The hospital is operated by the Sisters of St. Joseph and the total cost of the addition, including building and equipment, is estimated at $160,000. A grant of $35,000 has been awarded to the hospital by the Consolidated Mining and Smelting Co., of Canada Ltd.

Alberta

CALGARY. Calgary hospitals have received a 65-cent-a-day increase in grants from the provincial government for the $1-a-day hospitalization scheme, effective as of the beginning of January. Under the new system of grants hospitals receive $1 per day from city ratepayers, $2.90 from general city revenue, and $2.90 from the provincial government. Formerly the patient paid $1 per day, the city $2.25, and the provincial government $2.25, which covered the daily public ward rates of $5.50. The daily ward rates have been increased to $7.50 and this will be covered by the increased grants. Hospitals will continue to receive the province's basic 70 cents a day grant for each patient.

* * * *

LETHBRIDGE. A new schedule of increased hospital rates for the Galt Hospital became effective at the beginning of January and are as follows: standard ward, $6. from $5. per day; four-bed wards, $6.50 from $5.50; two-bed wards, $7. from $6.; private room without bath, $7.50 from $7.; and private room with bath, $8. from $7.50. The government is increasing its grants to hospitals for cases coming under the $1-a-day hospitalization plan. New rates will be $6.10 per day, of which the government will pay $2.55, the city $2.55, and the patient $1. Under the old rate of $5 per day the government paid $2, the city $2, and the patient $1.

Saskatchewan

DODSLAND. Extensive renovations and repairs to the Dodsland Union Hospital were completed recently. On the third floor, the nurses' quarters have been moved into one section and closed as a separate unit. Several rooms on this floor are being used for storerooms, while others can be converted into patients' rooms, if necessary. The second floor wards have been redecorated and two rooms on the main floor, formerly used for living quarters, have been remodelled to make space for an office and a laboratory. An automatic stoker has been installed and the entire hospital has been rewired.

* * * *

SASKATOON. The three-storey addition to the Queen Street nurses' residence at the Saskatoon City Hospital was officially opened in January. It contains 76 double rooms and was constructed at an approximate cost of $350,000.

Manitoba

ELKHORN. At a recent official ceremony the eight-bed, two-storey, white stucco structure of the new Elkhorn and district hospital was opened. The main floor consists of four 2-bed wards, a nursery with three bassinets, a maternity case room, offices, and a dispensary. Kitchen and dining room facilities are located in the basement, along with the staff quarters, laundry, and store rooms. Throughout the $59,000 hospital, the floors are of asphalt tile and the rooms have been decorated in soft pastel shades.

Ontario

HAMILTON. A sweeping five-year plan for revision and extension of hospital accommodation in Hamilton has been prepared by the Hamilton Hospital Associates Inc. Under this scheme, the new building of the Mount Hamilton Hospital, planned some years ago but never carried past the excavation stage, would be completed and become mainly a medical hospital; and the Barton Street General Hospital would become mainly a surgical hospital. One wing of the proposed new building at the Mount Hamilton Hospital would be used as a children's wing and would contain approximately 150 beds. Expansion plans also include a steam plant and laundry, as well as an addition to the nurses' residence. Plans for the Barton Street General Hospital, include: use of the present children's wing as children's surgical wards; use of the present main building as a nurses' infirmary; the demolition of Ward A; as well as other changes.

* * * *

SUDBURY. The provincial government has authorized a grant of $160,000 to the Sudbury General Hospital of the Immaculate Heart of Mary. The hospital is planning to construct a 100-bed nurses' residence; add 17 beds to the paediatric department; and increase the bed capacity on the seventh floor to accommodate 43 additional adult beds.

Quebec

MONTREAL. Ste. Jeanne d'Arc Hospital has officially inaugurated a $2,250,000 expansion program which will add 150 beds to its capacity, provide increased medical facilities, and accommodate the nursing staff and school in a new 10-storey building. The first construction work, now underway, is the addition of a new wing to the present hospital. This building will increase the hospital's bed capacity from 290 to 440 and will include dispensaries, laboratories, operating rooms, and other services.

* * * *

MONTREAL. The new Julius Richardson Convalescent Hospital for Children, which is under construction on Bessborough avenue at Cote St. Luc road, is now nearing completion. It will replace an older 50-bed institution which has been operating at Chateauguay Basin for several years and will have accommodation for approximately 150 patients. It is expected that the new hospital, for children under 13 years of age, will be occupied by early spring. C. R. Tetley, F.R.I.B.A., Montreal, is the architect.

* * * *

MONTREAL. A contract has been let for the construction of a new north wing to the Montreal Neurological Institute. The cost of the addition, which will double the institution's floor space, is estimated at $2.300,000. Exterior walls will be of limestone and the design is Scottish baronial to harmonize with the existing buildings. The institute's annex has been demolished thereby reducing the bed capacity to 85 but the addition will increase the total number of beds to approximately 135. Facilities will be greatly expanded by the addition and included among its special features will be an emergency ward, located in the basement, which may be used as a disaster casualty ward in the case of a bombing raid. Although it will have a variety of peace-time purposes, the basement is planned to take care of the decontamination of cases involving bacteria, gas or atomic isotopes. It has facilities for resuscitation, anaesthesia, and operating rooms, as well as x-rays and wards.

* * * *

SHERBROOKE. It has recently been announced that the new Sherbrooke Hospital has been officially approved for the training of interns by the Canadian Medical Association.

Nova Scotia

DIGBY. The Digby General Hospital launched a campaign in January to raise $7,000. At the end of November, the hospital had an overdraft of approximately $12,000 and funds raised through the campaign will be used to help meet the current financial crisis.

* * * *

BERWICK. A new wing to the Western Kings Memorial Hospital has been officially opened. The two-storey, $101,000 addition contains an operating room, maternity and nursery department, nine semi-private rooms, six private rooms, x-ray rooms, nurses' stations, doctors' consultation room, utility room, and storage rooms.

* * * *

WINDSOR. Recently, ratepayers of Windsor voted 117 to one in favour of a new corporation for the Payzant Memorial Hospital, which would provide for joint ownership of the hospital by the town of Windsor and the municipality of West Hants. Under the joint ownership scheme, which formerly received the approval of the municipal council, the real and personal property of the hospital, as well as the endowment fund, will be transferred to the new corporation. The town and municipality will have equal representation and equal responsibility for debts and deficits incurred by the hospital.

Admission et Départ

(Suite de page 48)

l'accompagne, si le malade est catholique? Celui-ci réunit assez de force pour répondre "qu'on est libre de pratiquer la religion qu'on veut" . . . Renseignements suffisants pour assurer à ce malade les secours spirituels en temps opportun.

Dans le cas d'un enfant, il faut savoir d'une façon certaine, s'il a été baptisé ou seulement ondoyé et s'il a été confirmé. Ces détails doivent paraître sur l'historique médical ou autre tableau de renseignements utilisé par le personnel hospitalier à l'étage des malades. Cette précaution évitera bien des courses affolantes en cas de danger de mort.

Le permis d'opération est ordinairement signé à la première entrevue. S'il s'agit d'un patient inconscient, non accompagné, avis en est donné à l'hospitalière à qui incombe l'obligation d'obtenir la signature d'une personne légalement responsable avant que l'opération n'ait lieu. Dans le cas d'un mineur, l'autorisation des parents ou des tuteurs est requise. Seule une intervention urgente est permise; le chirurgien se rend alors responsable et signe en conséquence au dossier du malade.

S'il a lieu de faire attendre, il faut savoir distinguer un malade qui n'en peut plus, car une fatigue devinée et secourue est une première thérapie fort appréciée.

Si le malade arrive en ambulance, il est immédiatement conduit à sa chambre et un membre de la famille se présente au bureau pour faire les arrangements.

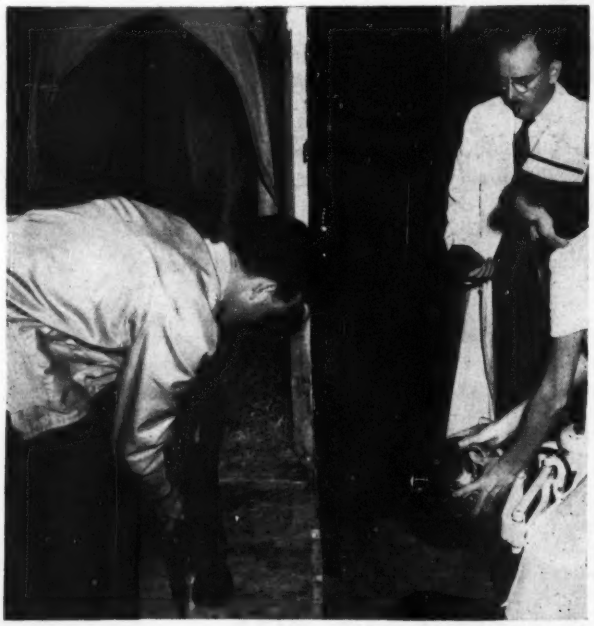
Que penser d'une organisation où tous les malades sont conduits immédiatement à leur chambre sans arrêter au bureau d'admission? Un parent responsable passerait alors au bureau faire les arrangements financiers; dans les cas douteux, une entrevue aurait lieu immédiatement avec le bureau d'enquête. On rapporte que ce système semble satisfaisant dans certaines localités.

Inscription à la Dactylotype

1. Pour économiser le temps;
2. parce qu'on reproche fré-

X-Ray Department Has Unusual Visitor

A hospital's x-ray department is often the scene of varied and interesting incidents. Probably the most extraordinary event to occur in this department, in some years, at the Hotel Dieu Hospital, Kingston, Ont., happened last spring when an appointment for an x-ray was made for Margelwyn. Great excitement and curiosity reigned over the department when it was learned that Margelwyn was a race horse, a pacer to be exact, and a prize winner in Eastern Ontario.



Owner, C. E. Gollogly (left), Dr. C. W. Burr (middle), and Mrs. Kennedy (right), lend a helping hand to Margelwyn.

Margelwyn had sustained an injury to her right rear leg which, although at the time appeared trivial, failed to respond to treatment and steadily grew worse. Veterinarians advised Margelwyn's owner to have the injury x-rayed. One morning an appointment was made by telephone and that afternoon Margelwyn arrived in a trailer at the ambulance entrance. Here, preparations had been made for her arrival and a portable x-ray machine had been wheeled out to the entrance.

Margelwyn was a most cooperative patient and Dr. C. W. Burr, the hospital's radiologist, assisted by two technicians, succeeded in obtaining several good pictures. The plates showed that the leg had not been fractured and everyone concerned was most pleased that Margelwyn was not seriously injured and would be able to run in future races.—*Rev. Sister Mary of the Assumption.*

quemment aux hôpitaux de poser trop souvent les mêmes questions;

3. parce que les reseignements fournis par cette copie sont conformes aux renseignements obtenus du patient, et toujours lisibles.

On peut employer une dactylotype spécial "ditto" pouvant écrire simultanément à l'aide de papier carbone autant de feuilles qu'il y a de services intéressés à connaître certains détails contenus dans la formule d'admission:

nom et prénom, âge, no. d'hôpital, no. de la chambre, adresse, no. de téléphone, religion, nom du service, date d'entrée, heure d'entrée, nom du médecin traitant.

Il y a aussi le système "addressograph" qui a l'avantage d'éliminer le papier carbone et de faire les fiches et réquisitions ultérieures pendant l'hospitalisation.

L'Hospitalière est la première intéressée à obtenir ces renseignements et le portier en emportant les bagages du patient lui remet cette feuille. Elle peut donc saluer le patient par son nom ce qui donne à ce dernier l'heureuse impression d'être attendu. Aux autres services: comptabilité, service téléphonique, poste d'information, aumônier, laboratoire, rayons-x, pharmacie, la distribution se fait par messager à différents intervalles de la journée, ou par tube pneumatique dans les grands hôpitaux.

La facilité et l'assurance avec lesquelles l'officière peut répondre aux questions du patient et de ses parents font disparaître leurs dernières appréhensions: questions de finance, de bénéfices à recevoir d'une police d'assurance peu comprise, des règlements de l'hôpital, des heures de visites (un règlement écrit pour visiteurs et renseignements sur l'hôpital est donné au cours du questionnaire). Y a-t-il un aumônier? L'Hôpital loue-t-il des radios aux patients, à qui confier ses bijoux, et son argent? Que comprend la pension? Y aura-t-il beaucoup d'extras? Le service du barbier? Renseignements sur le médecin que le patient n'a pas encore vu; autant de réponses que demandent du tact et devant lesquelles il ne faut pas hésiter.

Le bureau d'admission a été appelé "le coeur de l'hôpital" il doit en effet être la source des renseignements pour le patient, sa famille et le personnel hospitalier. Le patient qui vient à l'hôpital pour la première fois est un véritable novice. Toute son éducation est à faire au point de vue acclimatation avec sa maladie premièrement, et aussi avec l'atmosphère de l'hôpital; viennent ensuite les règlements qui le protégeront s'il sait les faire observer par ses parents et amis.

Que le coeur de l'officière reste toujours sensible, qu'il ne s'endurcisse pas au contact de tant de souffrances auxquelles il pourrait s'habituer. On a parlé quelquefois d'un "coeur d'hôpital," non, le coeur de l'officière doit rester toujours tendre.

Détails Inhérents à un Changement de Chambre

Si pour une raison sérieuse et justifiable un malade désire changer de chambre, la demande doit en être faite à l'officière d'admission de qui relève la disponibilité des lits. Celle-ci doit s'assurer du consentment du médecin traitant avant d'autoriser un transfert, procédé qui implique:

une correction de l'index des lits;

un avis à faire distribuer à la comptabilité, aux postes d'information et de téléphone, à la cuisine de diète, à l'aumônier, et aux services de qui la comptabilité attend des rapports quotidiens;

quelquefois, un nouvel arrangement financier à faire accepter au malade;

peut-être, une revision au tableau des réservations si la chambre désirée est déjà retenue pour un autre patient;

enfin, le transfert du malade par le personnel de l'étage qu'il quitte, ainsi que le transport de son dossier, vêtements et effets personnels.

Les hospitalières et les médecins désireux d'éviter au patient des ennuis toujours à redouter pouvant résulter d'une mésentente au sujet de l'allocation des lits, sont invités à collaborer étroitement avec l'officière au service d'admission afin de lui faciliter la tâche difficile de plaire à tout le monde.

La liste des opérations est préparée à ce bureau, liste indiquant le jour de l'opération, l'heure, le nom de l'anesthésiste, des assistants; la distribution aux services intéressés est faite par l'admission. Le recensement journalier et les nouvelles à donner aux journaux sont ordinairement centralisées au bureau d'admission.

(à conclure en mars)

Blue Cross Plans

M.H.S.A. Increases Rates in Manitoba

The Manitoba Hospital Service Association has announced that there will be an increase in its Blue Cross rates shortly. All members are being notified of the revised rates which are expected to be in effect by March 1st.

New monthly rates for group subscribers are: Ward Service—an individual will pay 95c, families will pay $2.60; Semi-Private Service — an individual will pay $1.20; families will pay $3.30. For non-group subscribers the new rates will be: Ward Service — individual, $1.20; families, $2.85; Semi-Private Service —individual will pay $1.45 and families will pay $3.55.

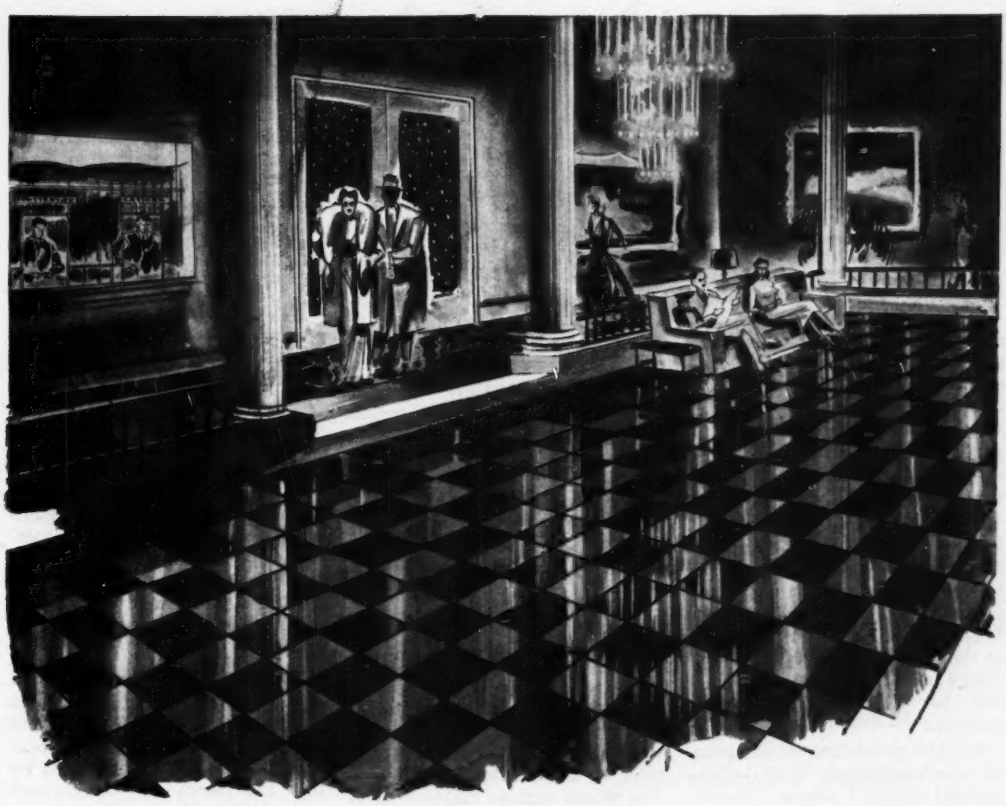
The Manitoba Hospital Service Association now has some 315,000 subscribers and nearly 50,000 hospital admissions were paid by the Service during 1951.

* * * *

Harold Baumgarten, Jr. Joins Blue Cross Commission

Harold Baumgarten, Jr., has joined the Blue Cross Commission as manager of the Hospital Relations Division. In this position he will maintain liaison with the American Hospital Association on matters of mutual concern to Blue Cross Plans and hospitals.

Mr. Baumgarten's experience in the hospital and Blue Cross fields includes more than three years as an administrator of hospitals in Oregon and Idaho and a year and a half as director of hospital relations for Idaho Hospital Service, the Blue Cross Plan with headquarters in Boise. •



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A Hospital and Community Challenge:

Rehabilitation

ALMOST every general hospital has a certain number of long-term patients who require prolonged intensive medical supervision and some degree of rehabilitation therapy. Some authorities believe that such patients tend to become "lost" in general hospitals where there is no special rehabilitation service available.

Concentration of these patients in one well staffed and equipped rehabilitation unit, they believe, will not only provide the specialized care they need but may also bring to the entire hospital staff, as they observe the unit in operation, a new understanding of what can be done for the chronic patient.

For the physician, the existence of a rehabilitation unit in the general hospital makes consultation easier and provides an impetus for transferring his patients there for necessary rehabilitation therapy.

Survey of General Hospitals

To learn more about the problems of caring for long-term patients in general hospitals, the Commission on Chronic Illness, with the co-operation of the American Hospital Association, sent a questionnaire to approximately 2,600 American Hospital Association classified general hospitals of 50 beds or more. Hospitals were asked if they had an organized rehabilitation service. For survey purposes this was defined as a service which: (a) studies patients with residual handicaps or disabilities due to illness or accident; (b) provides training and therapy to help the patient to adjust to, compensate for, or overcome the disability. (General hospitals reporting this type of rehabilitation program are differentiated from those whose services consist solely of physical therapy departments.)

Among the first 1,600 hospitals responding, 65 reported that they now operate organized rehabilitation services. Eighteen of these function in special wards; in the other 47, rehabilitation patients are not segregated. All but 12 of the 65 hospitals also provide outpatient rehabilitation service. Rehabilitation committees were reported by 34 of the 65 hospitals.

The questionnaire was intended to locate and identify rather than to evaluate the rehabilitation services. However, some information on staff of the services was secured. Staffs ranged from services which include full-time physicians with special training in physical medicine, physical therapists, occupational therapists, vocational counsellors, social workers, and others, to services consisting of a physical therapist and social worker, or one physician and a physical therapist. Following is a summary of the number of hospitals reporting full-time rehabilitation service staff (one or more) of each type:

Bed Capacity

	Total	Under 100	100-249	250-499	500-999	1000 & Over
No. of hospitals	65	2	21	19	18	5
No. having physicians with special training in physical medicine	52	2	15	16	14	5
Physical therapists	61	1	18	19	18	5
Occupational therapists	49	1	13	14	16	5
Speech therapists	21	0	4	3	11	3
Vocational counsellors	9	0	3	1	4	1
Social workers	41	1	12	7	17	4
Other staff	10	0	2	2	4	2

The information obtained does not permit an evaluation of the rehabilitation training provided in these hospitals; this must await further study. It is significant, however, that a substantial number of these rehabilitation services with relatively extensive staff, are located in general hospitals of less than 250 beds.

Starting a Rehabilitation Unit

Proponents of the establishment of rehabilitation wards in general hospitals state that the success of such a rehabilitation ward will hinge upon the kind of medical direction it is given. Installation of a unit for rehabilitation and chronic care in a general hospital requires a medical director with training, enthusiasm, and organizational ability. It is also necessary that properly trained physical therapists, occupational therapists, social workers, nurses, and others, be available in the team approach.

There are, of course, special problems in establishing and equipping a rehabilitation and chronic care unit in a general hospital. An example is afforded by the experience in Connecticut where, in 1949, the Commission on the Care and Treatment of the Chronically Ill, Aged and Infirm provided funds to the Grace-New Haven Community Hospital, a general hospital, to equip and staff a 31-bed "rehabilitation service".

The first major change made by the hospital was the increase of bathroom facilities since both male and female patients were to

Reprinted from "Chronic Illness Newsletter", October, 1951. This bulletin is published by the Commission on Chronic Illness, Chicago, Ill.

be cared for in this division and most of the patients would be ambulatory. Handrails had to be added to the toilet rooms and shower to assist this new type of patient. Two toilets and one shower were provided for men and the same for women.

The solarium was redecorated for a recreation area and special furniture was manufactured. Because most of the patients could not sit on an "easy chair" the new chairs were firm. Tables were constructed so that wheel chairs could fit under them. Wheel chairs with all types of adjustments were obtained so that each patient might have a chair to meet his particular needs. A television set was obtained for the solarium by the volunteer service which also arranged for regular movie shows.

The waiting room of the floor was converted into an occupational therapy room and the services of a therapist obtained. The physical therapy department was expanded. New equipment was added and the staff was enlarged. The social service department assigned one worker to have complete responsibility for the patients in the rehabilitation unit.

During the first six months of operation, the unit treated 20 "state charge" patients with a total number of patient days of 2,358, or an average of 118 days per patient, and 44 private patients with a total number of 2,868 patient days or an average of 65 days per patient.

The diagnoses of patients treated have included amputations, paraplegias, multiple sclerosis, cerebral accidents, rheumatoid arthritis, and poliomyelitis.

The Cost Factor

Hospitals considering the establishment of rehabilitation and chronic care units must, of course, consider the cost factor. The Connecticut Commission gave Grace-New Haven Community Hospital $35,000 for the first year of its operation. Approximately $15,000 was used for equipment and capital expenditures for physical changes and about $16,000 was spent on special personnel to establish the unit. At the end of the first year, the hospital returned $4,000 to the Commission. For the second fiscal year, the Connecticut Commission gave the hospital approximately $20,000 for personnel in the chronic care unit.

On the basis of experience at Grace-New Haven, it appears that the over-all cost of caring for chronic and rehabilitation patients is not a great deal less than that for other hospital patients. Food, housekeeping, administration, heat, light, power, and insurance are fixed hospital costs chargeable proportionately to patients in all of the units.

Although the chronic and rehabilitation patients need fewer special services such as drugs, dressings, operating rooms, x-rays, laboratory, and anaesthesia, the amount of physical and occupational therapy is greater and nursing requirements of rehabilitation patients at Grace-New Haven were quite specialized and quite high.

Rehabilitation Can Pay for Itself

These economic factors must be considered by hospitals planning rehabilitation units. However, it has been demonstrated that rehabilitation pays off economically.

Experts in the field of rehabilitation and re-training have estimated that 97 per cent of all handicapped persons can be rehabilitated to the extent of gainful employment.

The total earnings of a group of 60,000 persons rehabilitated by the Office of Vocational Rehabilitation in 1950 were raised from $17 million to $95 million.

Before rehabilitation public as-

New Wing Opened at Lyndhurst Lodge, Toronto

Patients, staff, and guests attended the official opening of a new wing at the Canadian Paraplegic Society's Lyndhurst Lodge, Toronto, in December. The new additions, which were constructed in three months, enlarge the gymnasium and increase the physiotherapy facilities.

Substantial cash contributions were made by Carling Breweries Limited and the Maple Leaf Gardens, Toronto, with the assistance of contractors and supply houses. The project received the wholehearted support of all concerned and many willing contractors spent hours in over-time work, as well as contributing materials.

sistance was needed for 10% of these disabled individuals and also for their families. After rehabilitation this group began paying taxes estimated at $5,500,000 per year. Community health and welfare agencies, official and voluntary, are becoming more aware each day that new rehabilitation programs do not represent additional expenditures—but substitute expenditures. Cost of returning an individual to a job or to self-sufficiency is a single one-time investment — public assistance for a helpless person is a recurring expense.

Rehabilitation is no longer a philanthropic project. While it pays for itself a thousand times in humanitarian values by offering new life and new hope to the disabled, rehabilitation can also pay its own way in dollars and cents by discharging people who might otherwise be hospitalized for many years.

A Hospital-Community Challenge

Hospitals are concerned about the problem of chronic illness. The installation of a rehabilitation unit is a tangible contribution the general hospital can make to the over-all community chronic illness program.

The American people contribute generously each year to drives for funds to control the major chronic diseases. It would be desirable to explore possibilities for co-operative financing, by these agencies, of patient care in the chronic and rehabilitation ward. The cost of installing such a unit in the hospital and the relatively high cost of care need not present great obstacles if responsibility is shared with the hospital by many organizations as a part of a community-wide chronic illness program.

Some Guideposts

The following suggestions, based on the experience of one hospital, may be of value to other hospitals planning to establish a rehabilitation service.

1. Start as soon as possible to orient the medical staff in the philosophy of medical rehabilitation.

2. Stress the team approach of all disciplines in the care of the patient.

3. Develop procedures for purchase of braces, wheel chairs, and other appliances. These are very essential to patient care and represent sizable expenditures.

4. If all specialists, such as speech therapists, audiologists, psychiatrists, and vocational counsellors are not available, arrange for the purchase of these services so that the rehabilitation service may meet all the needs of any patient.

5. A screening clinic would be valuable to evaluate the patients' needs and chances for successful rehabilitation before admission to the hospital.

6. A home care program following discharge should be planned to follow through on the treatment and exercise recommended at home, aid in family adjustment, and study the social gains and problems of the patient.

7. Obtain co-operation and financial support for the project from community organizations to make the unit a part of an over-all community chronic illness program.

"Good Food Makes Good Sense" or "Nutrition for Today"

Students and teachers concerned with dietetics will be glad to know that the excellent book, "Good Food Makes Good Sense," written by Elizabeth Chant Robertson, M.D., Ph.D., and published by McLelland and Stewart Limited, is available to them in a students' edition entitled, "Nutrition for Today." The price of the latter is $2.95.

"Good Food Makes Good Sense" was reviewed in *The Canadian Hospital* of December, 1951, page 64. A chapter, from the book, on the subject of meals for nursing and expectant mothers is reprinted on page 60 of this issue.

Why Not?

A spend thrifty fellow named Hi,
Who charged everything he could buy,
Said, when hailed into court,
With his bank account short,
The government does, why can't I?"

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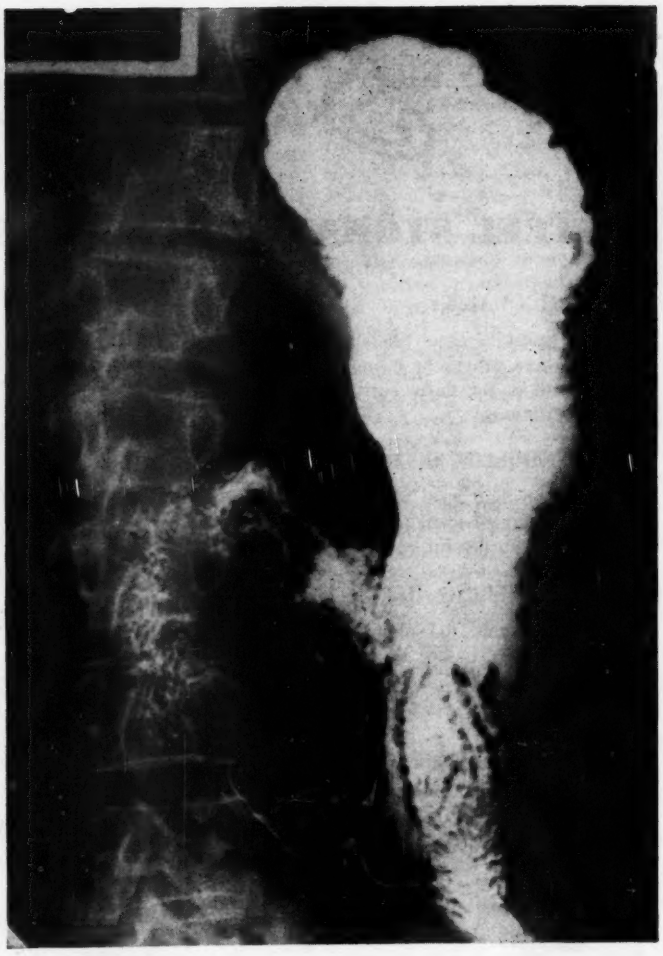
Ilford Red Seal Medical X-ray Films present the facts of the case without prejudice or bias. Its high speed makes it particularly suitable for radiography of the larger subject — for the regions of greater thickness and density, such as the lumbo-sacral region from the lateral aspect, full term pregnancy, the abdominal organs and so on. Ilford Red Seal X-ray Film is invaluable for all examinations in which exposure time must be kept to a minimum, and is eminently satisfactory with modern high ratio grids.



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"Sapienter Cogita, Age Benigne"

(The following is an editorial appearing in the June, 1951, issue of "The Hospital Magazine" published in Melbourne, Australia)

THIS Latin inscription is the motto or maxim adopted as the rule of thought and of conduct for young hospital administrators in training and, in plain English, it means, "think wisely, act graciously".

Because human beings come to act and to live as they *think*, this maxim would serve a worthy purpose if adopted and thought about, not only by *young* administrators in the making but by older ones, not only by administrative personnel, but by nurses, doctors, technicians, engineers, and all ancillary workers in our hospitals. Indeed, it would be well for this country and for the world, if people generally in industry, commerce, politics, and professions, were to place its simple interpretation and its application upon the impulse mechanism of their minds and hearts.

As a code of life, there is nothing sentimental or sloppy about it and it is not theoretic or academic, but intensively practical. Applied to each matter under consideration and to every contemplated and executed act of mind or hand, it means just what it says, "think wisely, act graciously".

Dealing as we all are from the highest to the humblest, in some measure at least, with the intimate physical requirements, the health and, indeed, the very lives of sick people, hospital personnel *need to think* wisely, with the wisdom of scientifically trained understanding—understanding of human physiology, its reflexes and its needs, also of our own limitations.

Dealing as we all are in some measure with the mental sensitivity of suffering, anxious people who are experiencing either in themselves or in their friends or relatives something entirely new, something that they fear because so often they don't understand, it is imperative that all hospital people think wisely, with that wisdom that embraces deep human understanding—understanding of all those factors both simple and complex, that go to the retention and regaining of human happiness.

But just as it is necessary in all the human undertakings of a hospital to think wisely, so is it essential to implement our thinking in action that is gracious.

Within the scope and the thinking capacity of hospital personnel, we may find all the wisdom to answer the needs of our patients of every kind; but unless the application both individually and collectively is made graciously, it remains so completely mechanical that it can produce in its negative *contra* influence nearly as much damage as in its positive field, it may hold the potential for benefit.

No act anywhere in life and particularly within the functions of a hospital is worth the effort expended therein unless, having been projected primarily in wise thinking, it is in its execution expressive of a personality kindled by an inner graciousness and exhibiting by word, manner and touch those tokens which reveal the human understanding and ready kindliness which stimulates an act performed graciously.

Coming Conventions

Feb. 18-19—Sectional Meeting of the American College of Surgeons, Quebec City, P.Q.

Mar. 10-22—Cours de comptabilité, Comité des Hôpitaux du Québec, Montréal, P.Q.

Mar. 31-Apr. 1—Sectional Meeting of the American College of Surgeons, Vancouver, B.C.

Apr. 2-3—American College of Hospital Administrators Institute on Human Relations, Royal York Hotel, Toronto.

May 16-17—Sectional Meeting of the American College of Surgeons, Toronto, Ont.

May 18-21—Annual Convention of the Canadian Society of Laboratory Technologists, General Brock Hotel, Niagara Falls, Ont.

June 1-6—Biennial Meeting of the Canadian Nurses' Association, Chateau Frontenac, Quebec City, P.Q.

June 6-9—Maritime Hospital Association Convention, Algonquin Hotel, St. Andrew's, N.B.

June 10-12—Canadian Dietetic Association Convention, University of British Columbia, Vancouver, B.C.

June 15-18—Canadian Public Health Association, Fort Garry Hotel, Winnipeg, Man.

June 16-20—Western Canada Institute for Hospital Administrators and Trustees, University of British Columbia, Vancouver, B.C.

Oct. 8-9—Saskatchewan Hospital Association Convention, Bessborough Hotel, Saskatoon.

Oct. 16-18—Associated Hospitals of Alberta Convention, Palliser Hotel, Calgary.

Oct. 22-24—Associated Hospitals of Manitoba Convention, Royal Alexandra Hotel, Winnipeg.

Oct. 27-29—Ontario Hospital Association Convention, Royal York Hotel, Toronto.

"Universal Antidote" for Poison?

A "universal antidote" for poisons, the nature of which is not known, has been advanced by Jay M. Arean, M.D., and Grant Taylor, M.D., of Duke University School of Medicine. They presented a scientific exhibit on "Accidental Poisoning in Children" at the recent annual scientific assembly of the District of Columbia Medical Society in Washington, D.C., and suggested the use of burned toast, strong tea, and milk of magnesia to combat the poisoning.—*"X-Ray News", December, 1951.*

high potency . . . prolonged effect

new 800,000-unit penicillin gives high initial blood level, plus 48-hour repository action

γ PENICILLIN blood levels in the range of 5 units per cc. for one to four hours after injection, followed by effective maintenance levels for 48 hours—this is the two-fold advantage of ABBOCILLIN 800M, Abbott's new high potency penicillin. Prepared for injection, each 1-cc. dose contains 600,000 units of penicillin G procaine and 200,000 units of penicillin G potassium.

The high initial blood levels obtained with ABBOCILLIN 800M provide maximum killing power of susceptible organisms, assure adequate concentration at hard-to-reach infection sites. And ordinary infections respond to a treatment schedule of only 1 cc. every 48 hours, due to the repository nature of ABBOCILLIN 800M. Especially convenient when infrequent injections are desired; economical, unitage-wise. Silicone-treated vials assure complete drainage, prevent waste.

In 1-cc. and 5-cc. vials, singly and in boxes of 5 vials.

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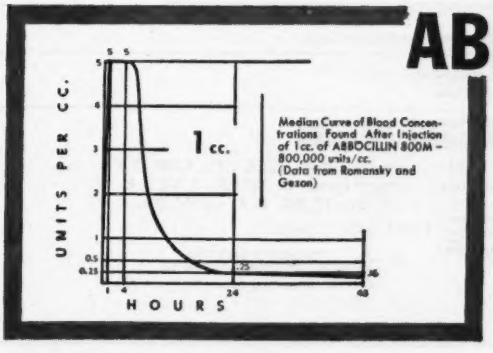

ABBOCILLIN 800M

Penicillin G Procaine
and Buffered Penicillin G Potassium
for Aqueous Injection, Abbott
800,000 units per cc.

Calculating the Answer

(Concluded from page 47)

counting practice, it is recommended in the handbook that a uniform basis for charging departmental expenses be adopted. It is suggested that the uniform classification of accounts be used as well as the uniform basis for recording patient and service statistics. Another thing that should be remembered is that where different cost analyses procedures are used by hospitals there can be no dependable comparison of costs among such hospitals.

Cost Analysis Method No. 2

There is illustrated on a separate chart, Cost Analysis Method No. 2, which is a variation of the first method in that the expenses of the non-revenue producing departments are first apportioned to those departments and then the sum of the direct expenses of the non-revenue producing departments plus the apportioned expenses are reapportioned to the revenue-producing departments.

One significant fact to be noted in this method is that once a non-revenue producing expense account has been closed out it no longer can be used either for direct apportionment to it or for reapportionment to other non-revenue producing departments.

Turning our attention now to the chart illustrating Cost Analysis Method No. 2, we find that the total expenses charged to the administration department of $81,900 has first been apportioned to all of the other departments, both revenue producing and non-revenue producing. This distribution of administration expense is shown in column one, under the heading "administration". In the second column headed "plant operation and maintenance" there is shown the direct expenses of this department of $112,300 to which has been added the apportioned amount of $5,004.09 from the administration department, indicating a total of $117,304.09 which has been apportioned to the remaining non-revenue and revenue producing departments, as shown.

The same method has been employed in apportioning the expenses of the other non-revenue producing departments to the remaining non-revenue producing departments and all of the revenue producing departments.

It will be noted that the total

COST ANALYSIS METHOD NO. 2

For The Blank Hospital For The Six Months Ended June 30, 1950

Description	Administration	Plant Oper. & Maint.	Laundry	Dietary	Housekeeping	Direct Expenses	Total Rev. Prod. Dept.	Basis of Apportionment
Administration	81,900.00	112,300.00	29,660.00	212,940.00	47,320.00			No. of Employees
Plant Op. & Main.	* 5,004.09	5,004.09						Square Ft. of Area
Total		117,304.09						
Laundry	* 3,603.60	* 8,973.76	12,577.36					Pounds of Laundry
Total			42,237.36					
Dietary	*25,544.61	*16,446.03	*6,268.02	48,258.66				No. of Meals Served
Total				261,198.66				
Housekeeping	*10,556.91	* 739.01	* 257.65	* 5,641.89	17,195.46			Square Ft. of Area
Total					64,515.46			
I.P. Rout. Serv.	28,599.48	75,473.45	34,165.81	249,705.92	53,405.90	272,380.00	713,730.56	
Operating Room	3,890.25	8,962.03	1,254.45	3,369.46	6,348.32	55,000.00	78,824.51	
X-Ray	548.73	2,240.51	59.13	235.07	1,587.08	46,000.00	50,670.52	
Laboratory	3,325.14	2,979.52	59.13	1,123.16	2,116.11	45,000.00	54,603.06	
O.P. Rout. Serv.	827.19	1,489.78	173.17	1,123.16	1,058.05	7,500.00	12,171.35	
Total	81,900.00	117,304.09	42,237.36	261,198.66	64,515.46	425,880.00	910,000.00	

Computation of Total In-Patient and Out-Patient Costs

"Revenue-Producing" Department Costs	Total I.P. & O.P. Costs	Total I.P. Costs	Total O.P. Costs	
I.P. Routine Services	713,730.56	713,730.56		
Operating Room	78,824.51	78,824.51		
X-Ray	50,670.52	34,648.22	16,022.30	No. of X-Rays: 8,650 I.P., 4,000 O.P.
Laboratory	54,603.06	49,022.06	5,581.00	No. of Exams: 32,850 I.P., 3,740 O.P.
O.P. Routine Services	12,171.35		12,171.35	I.P. days 72,100, O.P. visits 7,500.
Total	910,000.00	876,225.35	33,774.65	

* Closed out and reapportioned to revenue producing departments.

Cost per in-patient day ($876,225.35 ÷ 72,100) = $ 12.15
Cost per out-patient visit ($33,774.65 ÷ 7,500) = $ 4.50

in-patient costs as arrived at under method No. 2 are slightly in excess of those found under No. 1, but that the unit cost per patient-day is only two cents higher than under the former method. It will be seen that the cost per out-patient visit under method No. 2 is twenty cents less than that shown under method No. 1. The variation in unit cost per out-patient visit is greater because of the fact that the number of out-patient visits is considerably less than the total number of in-patient days on which the unit cost per patient-day is based.

(This article will be concluded next month.)

Medical Audit

(Concluded from page 34

ten the most valuable part of the program, by calling on the right people at the right time. He may dispel rising tensions by an appropriate, often humorous, comment. We have not had to worry about the discussion degenerating to a personal level; however, we have had to contend occassionally with such remarks as "Dr. X cannot be blamed for . . . et cetera"—as though the staff were preoccupied with fixing blame. We all make mistakes and very few will resent an impersonal discussion of these for the benefit of our patients and other staff members. At the same time incompetence and lack of honesty become readily apparent without being so labelled. The need for disciplinary action beyond this would be rare indeed.

We are equally convinced that a "referee" or even a panel of referees cannot achieve the desired results without seriously antagonizing the staff and thereby jeopardizing any chance of success in applying the principles of the medical audit. Moreover, since a doctor's ability and honesty can best be assesed by his confreres, and since such assessment and control must be a continuous process, it logically follows that each hospital medical staff must accept full responsibility for the analysis and supervision of the work of its individual members.

Hospital Auxiliaries

(Concluded from page 68)

mercy. Charity is the touch stone to the Divine. The Great Physician went about doing good. May we, in this spirit of benevolence, follow in His Footprints. Our aim and purpose is to give the type of assistance which will be an aid toward the development and operation of hospitals in Canada.

That country is richest which nourishes the greatest number of noble and happy human beings; that man is richest who, having perfected the functions of his own life to the utmost, has also the widest helpful influence, both personal, and by means of his possessions, over the lives of others.—*John Ruskin*

Baby patients haven't much to say Most babies know what they want and what they like . . . and they also know ways to make their wishes known.

Many babies have learned from experience that the smiling Heinz Baby on the Strained Food tins indicates food with the texture, taste and color they like. When they see the baby they dive into their dinner with confidence.

And the confidence is well-deserved. The choice, fresh ingredients in Heinz Baby Foods are selected with infinite care. Vegetables are garden-grown from special seed in rich and fertile soil. Careful checking also assures the finest fruits, dairy produce, meats and grains. Every variety is cooked the way you would desire—under scientific conditions so that minerals and vitamins are retained in high degree.

Heinz Pre-Cooked Cereals, Heinz Strained Baby Foods, and Heinz Junior Foods can always be safely recommended for the babies in your care.

Heinz

Makers of Baby Cereals • Strained Foods • Junior Foods

University of Alberta Hospital

(Concluded from page 42)

are four delivery rooms, one of which is equipped with a glass-fronted gallery for student instruction. Eight labour beds are accommodated in four labour rooms each of which has its own lavatory. The labour rooms are all equipped with oxygen and suction inlets and one of them also is supplied with nitrous oxide so that a precipitant labour may be handled there with ease. Oxygen and nitrous oxide are fed throughout the delivery suite, the latter from an independent bank located opposite the nurses' station. The same bank supplies the gynaecological section which is located immediately above or the second floor.

All corridor and case room walls are tiled to shoulder level and the floors are of terrazzo tile. The cupboards in the case rooms are built-in and have sliding glass doors. A heating cupboard is located in one utility room and is used for heating blankets and various solutions. The technical furnishings of the case rooms are modern in every way.

The balance of the obstetrical and gynaecological accommodation includes a total of 55 obstetrical and 30 gynaecology beds. Four of the private obstetrical rooms have their own showers and additional bathing facilities are located on both the first and second floors. The obstetrical solarium on the first floor is a convenient visiting room for patients and their relatives but a small sitting room has also been provided for patients only. Telephone and lavatory facilities are near at hand. The first floor also has a fathers' room.

The decentralized, air conditioned nurseries are all equipped with oxygen and suction inlets. They are large and spacious rooms and do not have cubicled areas for the infants. The lack of cubicles has enhanced the flexibility of the nurseries and the bassinet capacity can be over 70. Individual incubators have been used in the special nursery for premature babies so that the staff will not have to work in an area of ex-

cessively high temperature or humidity. Here again central oxygen and suction is available as it is in the suspect nursery of six cubicle units.

On the second floor special rooms have been designated as a unit intended to deal with patients suffering from threatened miscarriage of their pregnancy. These are situated across the hall from the gynaecological examining room and laboratory. Along with the laboratory and examining room they are supplied with oxygen, suction, and nitrous oxide.

Surgical Services

These services are confined to the third floor. This floor coincides with the floor level of the main building on which the operating rooms are located. The elevator transportation of patients to and from the operating rooms will be minimized by this arrangement.

A 22-bed neurosurgical unit is located at the end of the third floor, most remote from the elevators and the public. It features special dressing rooms in which various minor neurosurgical procedures may be carried out. Special beds have been provided with collapsible head and foot sections and sideboards which may be raised into position as required.

Medical Services

The fourth floor contains facilities for general medical cases as well as a section of 20 beds for metabolic diseases. This latter section includes its own metabolic laboratories staffed by technicians skilled in the special procedures involved there. Office space has been provided for the doctors and a small metabolic diet kitchen has been located on the floor. However, the majority of special diets will be prepared in the central servery.

There are many other features of the new additions to the University of Alberta Hospital which could be described. The new facilities are serving a long-felt need in the community and the medical school. The province, the university, and all persons associated with the hospital are rightfully proud of the results.

A Geriatric Commentary

(An editorial appearing in the Treatment Services "Bulletin," Department of Veterans Affairs, Ottawa, July-August, 1951).

Diseases of old age should rather be spoken of as diseases in old age. No disease is peculiar to old age. Many manifestations in the elderly, attributed to senility, are actually due to diseases to which all ages are subject, the susceptibility to which apparently increases with advancing age.

Seven per cent or more of our population is over the age of 65. The medical problem represented by this group is indicated by the fact that statistics show one in eight persons aged 65 or over suffers from some kind of physical disability, particularly chronic diseases. Furthermore, the rate of illness increases with increasing age.

Frequently the aged ill present multiple symptoms indicating simultaneous presence of several diseases. Generally findings are more ambiguous than in the young and, therefore, require greater use of laboratory aids and greater vigilance in observation by the examining physician. The periodic health examination affords an opportunity both to detect incipient disease and to teach the patient how to live. Diseases frequently found in the elderly are cardio-vascular-renal diseases, arthritis, cancer, and also anaemias and blood dyscrasias, skin lesions, pulmonary emphysema, tuberculosis, and chronic bronchitis.

In the past few years it has become more and more evident that surgery can be performed safely on the aged. It has been found notably successful in cases of hernias and of fractures.

Mental disturbances of the aged are not necessarily the result of age but are often the evidence and result of long-standing personal maladjustments. Nutritional deficiencies, drug intoxications, and brain tumors, can also account for cerebral disturbances. Naturally, the outlook for recovery from these latter conditions is good under nursing care and appropriate treatment, which may include vitamin therapy and shock therapy.

The sense of frustration common in the aged can be avoided through remunerative work, participation in community activities, recreational outlets, pre-retirement old age counseling, et cetera. The mistaken idea that old age is necessarily a period of illness and mental decay must be combatted through public education programs of disease prevention and broadly based research programs.

Life is like playing a violin solo in public and learning the instrument as one goes on.—*Samuel Butler.*

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ELASTIC ADHESIVE BANDAGE
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Each strip of Bandage Fabric is woven separately with individual control of thread tensions.

The improved Non Fray Edge provides the Advantage of a Bandage which will lie flat on the Limb.

By reason of the Greater Softness of Doubled Thread, the Flexoplast Fabric is more impermeable to the Adhesive spread, is cleaner on the back and softer and more flexible in use.

THE Stevens COMPANIES

TORONTO WINNIPEG CALGARY VANCOUVER

O. H. A. Essay Contest
—Successful Teenage Experiment

Last fall, the Ontario Hospital Association conducted an essay contest among the secondary school students of Ontario (see *The Canadian Hospital*, page 104, Oct., 1951, and page 44, Dec., 1951). The subject was "What Our Hospital Means to the Community" and the purpose of the contest was to awaken an interest in hospitals on the part of high school students who one day will be the homemakers and citizens called upon to support and staff their public hospitals.

With the contest over, and prizes awarded, the O.H.A. has tabulated the results and has found that the original purpose was well achieved. Over 2,000 essays were written and the publicity given to the contest in newspapers, over the air, and by "word of mouth", influenced thousands of people, the public at large, as well as students. The contest also established a fact of significance to all hospitals. Teenage high school students can be interested in hospitals if hospitals are interested in the students. The quality of essays spoke highly of the ability of students to assimilate basic facts concerning hospitals in an intelligent, forthright manner.

Therefore, the Association feels that this teenage experiment shows very clearly that, if hospitals are going to be received by an understanding, sympathetic public in years to come, the right impressions must be made upon the minds of the youth of the country—now.

Mortar Between the Bricks

(Concluded from page 58)

sideration of the problem by the medical profession is indicated today.

That a problem exists and that it is serious is undoubted. On the other hand, the very success of hospitals and doctors in making the transition to the economics of twentieth century free-enterprise industrial society is an augury for the future. Their foresight and leadership have strengthened the structure of the whole democratic community. The enrolment of 310,000 persons* in Blue Cross and the monthly payment to hospitals of a quarter of a million dollars is a tremendous gain to the profession and the well-being of the province, (Manitoba).

The stake too is high. Practical demonstration that the program can be effective in serving medically indigents and Social Welfare participants, in addition to the employed, at a cost for the whole population of two-thirds of the cost of compulsory plans, could not be ignored by government authorities.

The co-operation of hospitals and doctors with public-spirited citizens can safeguard high quality medical care for the population.

**In the eight Canadian provinces served by Blue Cross the total enrolment is approximately 3½ millions.*

Epidemiology

(Concluded from page 56)

and also to have communicable disease laundry so marked and secured that the worker may be warned and protected.

Soiled diapers should be collected in the ordinary surgery step-on cans. Nursery linen generally should be carefully rinsed to remove all soap and should be autoclaved before being returned to the nursery.

Equipment

All washable equipment should be washed thoroughly with soap and water and, for those pieces of equipment which may be damaged by soap and water, alcohol (70 per cent) may be used. Thermometers, both oral and rectal, should be washed thoroughly with soap and water and stored in a solution such as zepharin chloride (1/1000).

Mattresses and pillows should be protected with a rubber covering.

Terminal Safeguarding

Soap and water, fresh air and sunlight are most valuable in terminal disinfection. Mattresses and pillows should be exposed to air and sunlight for a period of twelve hours. All washable surfaces should be scrubbed with soap and water. Those hospitals which have a mattress autoclave in connection with their laundry will have little difficulty in the terminal disinfection of mattresses and pillows.

These procedures may be summarized as follows.

Respiratory - borne infections: Separate rooms preferable, gowns, masks and hand washing, concurrent and terminal disinfection as outlined.

Gastro-intestinal route infections: Cubicle preferable, open ward permissible, gowns and hand washing.

Skin and mucous membranes-borne infections: open ward (except as otherwise indicated in the table in this article), gowns, hand washing.

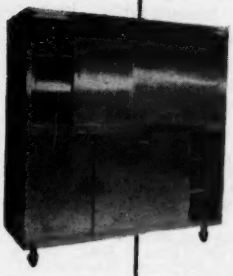
Safeguarding the air: Oil treatment of floors, germicidal vapors, air filters and oil treatment of bed linen, ultraviolet radiation and extraction ventilation.

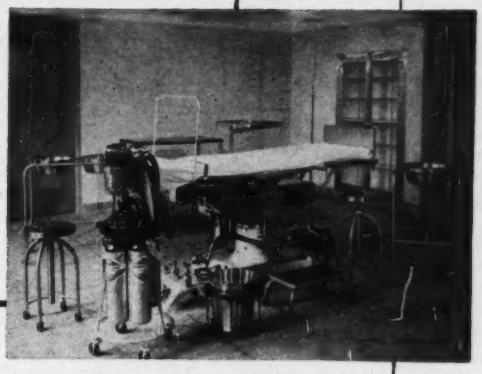
A digest of certain pertinent information regarding common communicable diseases is in table form in this article.

Hints on Decorating

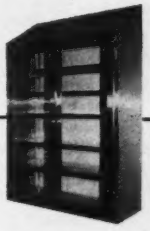
You can make a small room look larger than it is by skilful decoration. Walls should be plain and painted in a soft, pale colour to give a feeling of space. To increase the effect, match the ceiling and woodwork in the same colour. For the floor choose a plain carpet or linoleum fitted close to the walls — the colour in tone with the walls but darker.

To make a large, lofty room appear smaller use strong colours or a boldly patterned wall paper. Paint the ceiling a shade darker than the walls and put up a deep frieze or dado around the walls to reduce the sense of height. — *"John Bull"*

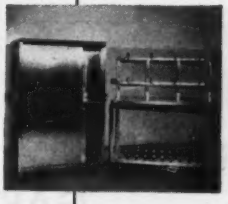




STAINLESS STEEL FOR LONG LIFE AND PERMANENT BEAUTY



The use of stainless steel in place of ordinary painted steel in the construction of hospital equipment has many practical advantages. Everlasting durability, attractive glistening appearance, aseptic quality, resistance to moisture, to chipping, and to discoloration, are a few outstanding features. Although the initial cost is higher than common steel, the relative cost of stainless steel is actually lower from a long time standpoint. STAINLESS STEEL WILL OUTLAST ORDINARY STEEL MANY TIMES. The use of stainless steel in the operating room is especially desirable — but practical applications are made in the nursery — in the workroom — the laboratory and the kitchen. Almost any piece of metal equipment — with a few exceptions — can be duplicated in stainless steel construction.



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Meals for Nursing Mothers

(Concluded from page 62)

ances recommended for a non-pregnant sedentary woman are shown in column one.

The calorie figure for the pregnant woman in Table 2 assumes that she is leading a sedentary life. When you compare the figures for the pregnant and the non-pregnant woman, you notice that although the increase in the calorie allowance for pregnancy is only 20 per cent, the increases in the other factors are usually very much greater. This means that foods high in complete proteins, minerals and vitamins (often called the protective foods) are needed in abundance, whereas those very high in calories, such as the fatty foods, sugars, syrups, and other sweet foods, which are also low in other food factors, should be used sparingly. It is generally believed that women should not gain more than 15 to 20 pounds in weight during pregnancy. If the pregnant woman is leading a moderately active life, she should eat somewhat more calories.

Suggested Menu for a Woman in Latter Half of Pregnancy

Breakfast
4 ounces canned orange juice
1 small serving rolled oats
3 ounces milk (on porridge)
1½ slices whole wheat toast
½ ounce cheese
butter
1 cup coffee—with sugar and cream
1 capsule fish-liver oil

Lunch
Scrambled egg
Salad—lettuce, tomato, celery, cheese, etc.
½ grapefruit
1½ glasses milk
1½ slices whole wheat bread
butter

Dinner
3-4 ounces beef
1 helping carrots
1 helping green peas
1 small potato (baked in skin)
butter on vegetables
1 helping cornstarch soufflé
1 oatmeal cookie (small)
1½ glasses milk

This menu meets the recommended allowances shown in Table 2.

The recommended allowances for the lactating or nursing mother are, as you can see in Table 2, considerably higher in most items than during pregnancy. A woman needs better food when she is breast-feeding her baby than at any other time in her life.

References

Nutrition in Pregnancy. Ebbs, Brown, Tisdall, Scott, Moyle and Bell, "Journal of Nutrition," 22: 515, 1941; "Canadian Medical Association Journal," 46: 1 and 6, 1942; "Journal American Dietetic Association," 18: 12, 1942; "Medical Clinics of North America," March, 1943, p. 537; "Journal American Medical Association," 121: 346, 1943.

Nutrition During Pregnancy. Burke, Stuart, Beal, Kirkwood and Harding, "Journal Pediatrics," 12: 493, 1938; "Journal of Nutrition," 25: 569, 1943; "Journal of Pediatrics," 23: 506, 1943.

Medically Speaking

Irish Corporal: "That's how 'twas. The bullet went in me chest and came out me back."

Newsman: "But how did it miss your heart?"

Irishman: "Me heart was in me mouth."

FOR YOUR GREATER CONVENIENCE

ONE GRAM DIHYDROSTREPTOMYCIN SULFATE AND STREPTOMYCIN CALCIUM CHLORIDE COMPLEX

NOW AVAILABLE IN NEW SMALL VIALS —5 c.c. instead of 20 c.c.

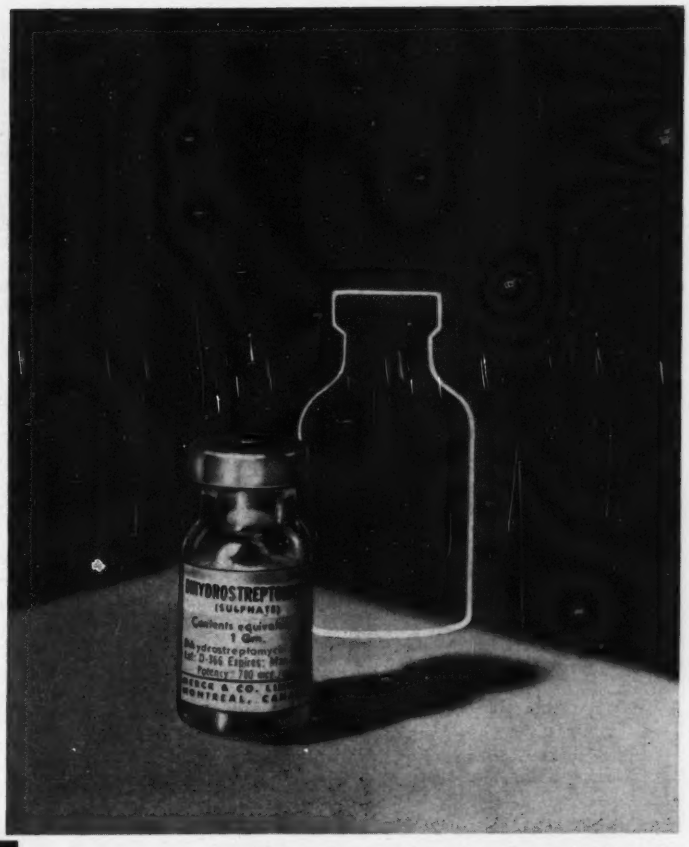

Illustration shows actual size of 5 c.c. vial compared to 20 c.c. vial.

NEW DILUTION TABLE

For Vials Containing the Equivalent of 1 Gm. of Dihydrostreptomycin Base

Solvent added to 1 Gm. vial	Approximate concentration per c.c.
3.7 c.c.	250 mg.
2.0 c.c.	400 mg.
1.5 c.c.	500 mg.

Three Noteworthy Advantages

1. Easier and more complete withdrawal of contents of vial.
2. Greater convenience to the physician as vials occupy less of the valuable space in his bag.
3. For hospitals less storage space is required. This is of particular value not only in shelf storage but also in handling.

MERCK ANTITUBERCULOSIS AGENTS

Streptomycin Calcium Chloride Complex Merck	Para-Aminosalicylic Acid Merck (PAS)	Dihydrostreptomycin Sulfate Merck

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Public Health Nurse in the Dental Field

For years public health nurses have felt somewhat ineffective in meeting community problems in dental health, mainly by reason of the lack of organized guidance. Now that this guidance is being made available both to community dentists and to health unit personnel, they are most encouraged, for they are much interested in, and anxious to support, this new division of health work. For some time they have felt the need of a dental consultant to augment their services in child health centres, for parents conditioned to public health measures are eager for the advice and opinion which only the independent consultant is capable of giving. Because of the service which they give in the homes of the community and because their number is greater by far than the dental group, nurses are particularly well able to act as liaison personnel between the families and dentists. In this way, the time of public health dentists can be saved for educational planning and service on a consultant level.

One of the tasks of the public health nursing supervisor is coordination of the nursing program. Her over-all planning is done in consultation with the medical health director in order to integrate the nursing objectives with the general aims of the health unit. On joining the unit the dental officer becomes a member of this administrative team; since there is such a great need for staff education and program unification in dental health, it would be unthinkable for him to be left out.

The dental officer through participation in the general staff education program comes to understand the services given in the community by the nurses and learns to share with them his experiences and knowledge. He can make available to them the findings of dental surveys and reports of recent scientific discoveries, as well as new ideas in conservation and prevention. Nurses also frequently express a desire for on-the-job training which he can give: for instance, how to recognize the early signs and symptoms of gingival disease and how to treat and prevent it; the more common orthodontic malformations, their cause and effect; and measures to be used in combating habits of thumb-sucking, tongue-sucking, and lip-biting, which sometimes lead to deformity. A co-operative venture of value to both dentist and nurses could be the assessing of current literature for authenticity and usefulness, before distribution is made to the public.

The education, function, and interest of the public health nurse could, and should, be used to full advantage in furthering dental public health if recognition of her potentialities is given by the group engaged in developing this speciality. With combined effort, the measure of success which the

dental public health specialist wants for his program could be more readily achieved and the whole would result in better community health and in better use of the taxpayer's dollar.—*Irene W. Lawson, Reg.N., P.H.N., Welland, Ont., in "Canadian Journal of Public Health", September, 1951.*

Study of Hospital Costs Launched by A.H.A.

An intensive two-year study of hospital costs and financing was launched recently by the American Hospital Association. Thought to be the first of its kind, the survey will be nation-wide and will seek to find the best ways of supplying high-quality hospital care at the lowest possible cost to the public. A half million dollars has been contributed by philanthropic foundations and individuals to finance the project.

An independent group appointed by the American Hospital Association and known as the Commission on Financing of Hospital Care will conduct the study. As a basis for future recommendations the Commission will evaluate the factors which influence the cost of hospital care to the patient.

Chairman of the group is Gordon Gray, president of the University of North Carolina. Graham L. Davis, on leave of absence as director of the division of hospitals of the W. K. Kellogg Foundation and past president of the A.H.A., will direct the Commission's activities. A pilot study course will be conducted in North Carolina as part of the national survey.

Sound Reasoning

A visitor at an asylum saw one of the inmates pushing a wheelbarrow upside down.

"That's not the way to push that thing," the visitor exclaimed. "You've got it upside down."

"Oh, have I?" answered the inmate. "I used to push it the other way and they put rocks in it."

Beauty is pleasure regarded as the quality of a thing.—*George Santayana.*

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An Alphabetical Directory of Equipment, Supplies, Building Materials and Specialties, with Names of Suppliers.

If you wish to obtain further particulars regarding sources of supplies of any kind, we shall be glad to secure the information for you. Please write The Canadian Hospital, 57 Bloor Street West, Toronto 5, Ont.

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G. H. Wood & Co., Ltd., Toronto.

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Metal Craft Co., Ltd., Grimsby, Ont.
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Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
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Simmons Limited, Montreal.
Robert Simpson Co. Ltd., Toronto.
Timco, Michael Co. Limited, Hamilton.
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Sunshine Waterloo Co. Ltd., Waterloo, Ont.

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Foodcraft Laboratories, Ltd., Toronto.
Gibbons Quickset Desserts, Toronto.
S. Gumpert Co. of Canada Ltd., Toronto.
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General Laboratories Limited, Toronto.

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Dye & Chemical Co. of Canada, Ltd., Kingston, Ont.
Harrisons & Crosfield (Canada) Ltd., Toronto.
Huntington Laboratories of Canada, Ltd., Toronto.
S. F. Lawrason & Co., Ltd., London, Ont.
McKague Chemical Co., Ltd., Toronto.
Stanley Brock, Limited, Winnipeg.

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S. H. Newman Co. Ltd., Toronto.
Robert Simpson Co. Ltd., Toronto.
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Dustbane Products, Ltd., Ottawa.
Dye & Chemical Co. of Canada, Ltd., Kingston, Ont.
Thomas Gibson & Co., Ltd., Toronto.
Huntington Laboratories of Canada, Ltd., Toronto.
Parke, Davis & Co., Ltd., Walkerville, Ont.
West Disinfecting Co., Ltd., Montreal.
G. H. Wood & Co., Limited, Toronto.

DISINFECTORS, METAL
American Sterlizer Co., Erie, Pa.
Canadian Laundry Machinery Co., Ltd., Toronto.

DISPENSERS
Liquid Soap
Dustbane Products, Ltd., Ottawa.
Thomas Gibson & Co., Ltd., Toronto.
A. Guinness & Co., Toronto.
Huntington Laboratories of Canada, Ltd., Toronto.
West Disinfecting Co., Ltd., Montreal.
G. H. Wood & Co., Ltd., Toronto.

DISPOSABLE DRINKING STRAWS
Flex-Straw Corpn, Cleveland, Ohio.
Ingram & Bell Limited, Toronto.

DOCTORS' PAGING SYSTEMS
Edwards of Canada, Ltd., Montreal.
Electro-Vox, Inc., Montreal.
Executone Communication Systems, Ltd., Toronto.

DOCTORS' IN AND OUT REGISTERS
Edwards of Canada, Ltd., Montreal.

DOLLS, HOSPITAL
Clay-Adams Co., Inc., New York, N.Y.

DOORS, FOLDING
Modernfold Doors, Montreal.

DOORS, LIGHT-PROOF
Modernfold Doors, Montreal.

DRAINAGE TUBING
Clay-Adams Co., Inc., New York.

Sterling Rubber Co., Ltd., Guelph, Ont.
Viceroy Mfg. Co., Ltd., Toronto.

DRESSINGS, PETROLEUM JELLY GAUZE
Smith & Nephew, Ltd., Montreal.

DRESSINGS, SURGICAL
Bauer & Black, Division of the Kendall Co. (Canada) Ltd., Toronto.
Casgrain & Charbonneau, Ltée., Montreal.
Davis & Geck Inc., Brooklyn, N.Y.
Johnson & Johnson, Ltd., Montreal.
Parke, Davis & Co., Ltd., Walkerville, Ont.
Smith & Nephew, Ltd., Montreal.
The Stevens Companies, Toronto.

DRUGS, CHEMICALS
See firms listed under "Pharmaceuticals".

DRUG SUNDRIES, RUBBER
Clay-Adams Co., Inc., New York.
Seamless Rubber Co., New Haven, Conn.
Sterling Rubber Co., Ltd., Guelph, Ont.
The Stevens Companies, Toronto.
Viceroy Mfg. Co., Ltd., Toronto.

DUMB WAITERS
S. A. Armstrong, Limited, Toronto.
Turnbull Elevator Co. Limited, Toronto.

DUPLICATORS and SUPPLIES
Ditto of Canada, Limited, Toronto.

ELECTRICAL MAINTENANCE SUPPLIES
Northern Electric Co., Ltd., Montreal.

ELECTRIC HEATING and COOKING APPLIANCES
Bell, Rinfret & Co., Ltd., Montreal.
Canadian General Electric Co. Limited, Toronto.
Moffats, Limited, Weston, Ont.
S. H. Newman Co. Ltd., Toronto.
Superior Electrics, Ltd., Pembroke, Ont.

ELECTRIC POWER EQUIPMENT, DIESEL
General Motors Products of Canada Limited, Diesel Division, Oshawa, Ont.

ELECTROCARDIOGRAPHS
Cathode Ray, Multi-Channel
Burdick Corporation, Milton, Wis.
Canadian Liquid Air Co. Ltd., Montreal.
Ferranti Electric Limited, Toronto.
Fisher & Burpe, Ltd., Winnipeg.
General Electric X-Ray Corporation, Ltd., Montreal.
The Stevens Companies, Toronto.
X-Ray and Radium Industries, Ltd., Toronto.

ELECTROCARDIOGRAPHIC EQUIPMENT and SUPPLIES
Ferranti Electric Ltd., Mt. Dennis, Ont.
X-Ray & Radium Industries Ltd., Toronto.

ELECTRO-MEDICAL EQUIPMENT
American Cystoscope Makers, Inc., New York.
Burdick Corporation, Milton, Wis.
Burke Electric & X-Ray Co., Ltd., Toronto.
Canadian Liquid Air Co. Ltd., Montreal.
Casgrain & Charbonneau, Ltée., Montreal.
Ferranti Electric Ltd., Mt. Dennis, Ont.
General Electric X-Ray Corporation Ltd., Montreal.
Hanovia Chemical & Mfg. Co., Newark, N.J.
Philips Industries, Ltd., Montreal.
X-Ray & Radium Industries, Limited, Toronto.

ELEVATORS, PASSENGER—FREIGHT
Turnbull Elevator Co. Limited, Toronto.

ENAMELWARE, SURGICAL
General Steel Wares, Ltd., Toronto.
Gilbert Surgical Supply Co., Toronto.
Ingram & Bell, Ltd., Toronto.
The Stevens Companies, Toronto.
Vollrath Company, Sheboygan, Wis.

ENGINES, DIESEL
General Motors Products of Canada, Limited, Diesel Division, Oshawa, Ont.

ENVELOPES
Globe Envelopes, Ltd., Toronto.

ETHER
Mallinckrodt Chemical Works Ltd., Montreal.
Merck & Co., Ltd., Montreal.
E. R. Squibb & Sons of Canada, Ltd., Montreal.

EXTRACTS AND FLAVOURS
Foodcraft Laboratories, Ltd., Toronto.
Gibbons Quickset Desserts, Toronto.

FEATHER STERLIZING EQUIPMENT
American Machine and Metals, Inc., East Moline, Ill.
Canadian Laundry Machinery Co. Ltd., Toronto.

FELT, SURGICAL ADHESIVE
Smith & Nephew, Limited, Montreal.

FILING SYSTEMS and RECORDS
Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

FILM, X-RAY
Canadian Kodak Co. Limited, Toronto.
Ilford Ltd., London, Eng.

FILTER, CERAMIC
Combustion Engineering Corp., Ltd., Montreal.
Crane, Limited, Montreal.

FILTERS, WATER
W. J. Westaway Co., Ltd., Hamilton, Ont.

FINANCIAL COUNSELLING SERVICES
John Price Jones Co. Canada, Ltd., Montreal.
Lawson Associates, Inc., Rockville Centre, N.Y.
Wells Organizations of Canada, Ltd., Toronto.

FIRE ALARM SYSTEMS
Edwards of Canada, Ltd., Montreal.
Northern Electric Co. Ltd., Montreal.

FIRE DOORS
Westeel Products, Ltd., Toronto.

FIRE ESCAPES, SLIDE
Westeel Products, Ltd., Toronto.

FIRE EXTINGUISHERS
Thomas Gibson & Co., Ltd., Toronto.
Pyrene Mfg. Co. of Canada, Limited, Toronto.

FIRE HOSE
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
Goodyear Tire & Rubber Co. of Canada, Ltd., New Toronto, Ont.

FIRE PROTECTION EQUIPMENT
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
Wilson & Cousins, Ltd., Toronto.
Pyrene Mfg. Co. of Canada, Limited, Toronto.

FITTINGS
For all Pressures and Purposes
Crane Limited, Montreal.

FIXTURES—ELECTRICAL, LIGHTING
Canadian General Electric Co., Ltd., Toronto.
Holophane Co. Ltd., Toronto.
Northern Electric Co., Ltd., Montreal.

FLAKED ICE MACHINES
Canadian Ice Machine Co., Ltd., Toronto.

FLOOR GLIDES
Darnell Corporation of Canada Ltd., Long Branch, Ont.
Stewart-Warner-Alemite Corporation of Canada, Ltd., (Bassick Div.), Belleville, Ont.
Viceroy Mfg. Co., Ltd., Toronto.

FLOOR SCRUBBING and POLISHING MACHINES
Dustbane Products Ltd., Ottawa.
Thomas Gibson & Co., Ltd., Toronto.
S. C. Johnson & Son, Limited, Brantford, Ont.
Frank P. Lalonde Limited, Montreal.
Walter G. Legge Co., Inc., New York, N.Y.
Gordon A. MacEachern, Toronto.
J. W. Turner Co., Lambton Mills, Ont.
G. H. Wood & Co., Ltd., Toronto.

FLOOR POLISH AND WAX
Dustbane Products, Ltd., Ottawa.
Thomas Gibson & Co., Ltd., Toronto.
A. Guinness & Co., Toronto.
Huntington Laboratories of Canada, Ltd., Toronto.
S. C. Johnson & Son, Ltd., Brantford, Ont.
Walter G. Legge Co., Inc., New York, N.Y.

For incomparable floor beauty and protection...

Choose floor care products by Johnson's Wax

CLEAN *with* *Johnson's Penetrating Floor Cleaner*

The powerful formula of Johnson's Penetrating Floor Cleaner will act quickly and thoroughly to soften old wax, dirt, and *all* surface film for easy removal. And it's absolutely safe! It can be used for general maintenance cleaning—on walls and woodwork—as well as for cleaning and wax-stripping of all floors other than wood . . . with exceptional economy!

WAX *with* *Johnson's No-Buff Waxes*

Both these No-Buff finishes—Johnson's *Green Label* and *Brown Label*—give floors bright, clear gloss that's wear-resistant. They are quick-drying, easy to apply, and entirely satisfactory for all floor surfaces. The high water-resistant property of *Brown Label* especially recommends it for heavy traffic areas where repeated moppings, water spotting, etc., present a problem. The extreme economy of *Green Label* makes it particularly suitable for floors that must be scrubbed regularly.

BUFF *with a* *Johnson Electric Polisher (also for scrubbing)*

With a Johnson Heavy-Duty Polisher . . . you can drastically cut floor care costs! Get faster, more efficient maintenance! In one hour, a Johnson Polisher can cover hundreds of square feet of floor, either scrubbing thoroughly or polishing floors to a new high lustre. The balanced construction of these Johnson Polisher-Scrubbers gives fast, smooth operation . . . and years of uninterrupted service.

MAIL COUPON TODAY

for complete information on Johnson's Maintenance Products . . . also for Johnson's Free booklet on "How to Care for Floors".

1974

S. C. JOHNSON & SON, LTD.

BRANTFORD, ONTARIO, Dept. CHJ

Please send me all the facts about Johnson's Maintenance Products . . . also the free booklet, "How to Care for Floors". I understand that this does not obligate me in any way.

Name.....Title.....

Company.....

Address.....

City.....Province.....

J. W. Turner Co., Lambton Mills, Ont.
Gordon A. MacEachern, Toronto.
West Disinfecting Co., Ltd., Montreal.
G. H. Wood & Co., Ltd., Toronto.

FOAM RUBBER CAST PADDING
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
Goodyear Tire & Rubber Co. of Canada, Ltd., New Toronto, Ont.

FOOD and MEAT CHOPPERS
G. S. Blakeslee & Co., Ltd., Toronto.

FRUIT DRINKS
Gibbons Quickset Desserts, Toronto.
S. Gumpert Co. of Canada, Ltd., Toronto.

FUMIGANTS
Against Clothes Moths
Merck & Co., Ltd., Montreal.

FUND RAISING ORGANIZATIONS
John Price Jones Co. Canada, Ltd., Montreal.
Lawson Associates, Rockville Centre, N.Y.
Wells Organizations of Canada, Ltd., Toronto.

FURNACES
Combustion Engineering Corp., Ltd., Montreal.
General Steel Wares Ltd., Toronto.

FURNITURE
Office, Wood or Steel
T. Eaton Co., Limited, Toronto.
Robert Simpson Co., Ltd., Toronto.
Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
Sunshine Waterloo Co. Ltd., Waterloo, Ont.
Timco, Michael Co., Limited, Hamilton.

FURNITURE COVERING, PLASTIC
Paul Collet & Co., Ltd., Montreal.
Timco, Michael Co., Limited, Hamilton.

FURNITURE CUSHIONING
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
Goodyear Tire & Rubber Co. of Canada, Ltd., New Toronto.

FURNITURE POLISH
Dye & Chemical Co. of Canada, Ltd., Kingston, Ont.
Gordon A. MacEachern, Toronto.

FURNITURE, SURGICAL AND WARD
T. Eaton Co., Ltd., Toronto.
Gilbert Surgical Supply Co., Toronto.
J. F. Hartz Co., Limited, Toronto.
Metal Craft Co., Ltd., Grimsby, Ont.
Metal Fabricators, Ltd., Tillsonburg, Ont.
Scanlan-Morris Co., Madison, Wis.
Simmons Limited, Montreal.
Robert Simpson Co. Ltd., Toronto.
Surgical Supplies (Canada) Ltd., Toronto.

GARBAGE REFRIGERATION
Frigidaire Products of Canada, Ltd., Leaside, Ont.

GARMENTS, HOSPITAL
Angelica Uniform Co. of Canada, Ltd., Montreal.
Bland & Co., Ltd., Montreal.
Corbett-Cowley, Ltd., Toronto.
CorDest Garments Ltd., London, Ont.
Lac-Mac Limited, London, Ont.
Timco, Michael Co., Ltd., Hamilton.
Robert C. Wilkins Co. Ltd., Farnham, Que.

GAS & SUCTION DISTRIBUTION SYSTEMS
British Oxygen Canada, Ltd., Toronto 14.
Canadian Liquid Air Co. Ltd., Montreal.
Dominion Oxygen Co. Ltd., Toronto.

GAUZE CUTTERS
W. J. Westaway, Ltd., Hamilton.

GAUZE SPONGES
Bauer & Black, Division of the Kendall Co. (Canada) Limited, Toronto.
Johnson & Johnson, Limited, Montreal.
Seamless Rubber Co., New Haven, Conn.
Smith & Nephew Ltd., Montreal.

GELATINE DESSERTS
Foodcraft Laboratories Limited, Toronto.
Gibbons Quickset Desserts, Toronto.
S. Gumpert Co. of Canada, Ltd., Toronto.

GERMICIDES
C. R. Bard, Inc., Summit, N.J.
Bard-Parker Co. Inc., Danbury, Conn.
Parke, Davis & Co., Ltd., Walkerville, Ont.
G. H. Wood & Co., Limited, Toronto.

GERMICIDAL LAMPS
Hanovia Chemical & Mfg. Co., Newark, N.J.

GLASSWARE, TABLE
Bell, Rinfret & Co., Ltd., Montreal.
British & Colonial Trading Co., Ltd., Toronto.
Cassidy's Limited, Montreal.
Johnson & Barbour, Limited, London, Ont.

GLASSWARE, LABORATORY
O. H. Johns Glass Co. Ltd., Toronto.

GLASSWARE, SURGICAL
Propper Mfg. Co., Inc., Long Island City, N.Y.
Canadian Laboratory Supplies Ltd., Toronto.
Cassidy's Limited, Montreal.
Clay-Adams Co., Inc., New York.
J. F. Hartz Co., Limited, Toronto.

GLASS WASHERS
Propper Mfg. Co., Inc., Long Island City, N.Y.
G. S. Blakeslee & Co. Ltd., Toronto.
Hobart Mfg. Co., Ltd., Toronto.
S. H. Newman Co. Ltd., Toronto.

GLIDES, FURNITURE, BEDS, ETC.
Darnell Corporation of Canada Ltd., Long Branch, Ont.
Metal Craft Co., Ltd., Grimsby, Ont.
Stewart-Warner-Alemite Corp. of Canada, Ltd., (Bassick Division) Belleville, Ont.
Viceroy Mfg. Co. Ltd., Toronto.

GLOVES, DUSTING POWDER, ABSORBABLE
Johnson & Johnson Limited, Montreal.

GLOVES SURGEONS', NURSES'
Canadian Laboratory Supplies, Ltd., Toronto.
Fisher & Burpe Ltd., Winnipeg.
J. F. Hartz Co., Limited, Toronto.
Ingram & Bell, Ltd., Toronto.
Propper Mfg. Co., Inc., Long Island City, N.Y.
Seamless Rubber Co., New Haven, Conn.
Sterling Rubber Co., Ltd., Guelph, Ont.
The Stevens Companies, Toronto.

GLYCERINE
Colgate-Palmolive-Peet Co., Ltd., Toronto.
Merck & Co. Limited, Montreal.

GOWNS, PATIENTS' AND OPERATING
Angelica Uniform Co. of Canada, Ltd., Montreal.
Bland & Co., Ltd., Montreal.
Corbett-Cowley, Ltd., Toronto.
CorDest Garments, Ltd., London, Ont.
Lac-Mac Limited, London, Ont.
Wilkins, Robert C. Co. Ltd., Farnham, Que.

GREEN HOUSES
Lord & Burnham Co. Ltd., St. Catharines, Ont.

HANDICRAFT SUPPLIES—OCCUPATIONAL THERAPY
Arborite Co. Limited, Montreal.
Crescent Surgical Sales Co., Inc., New York, N.Y.
Lewis Craft Supplies, Ltd., Toronto.

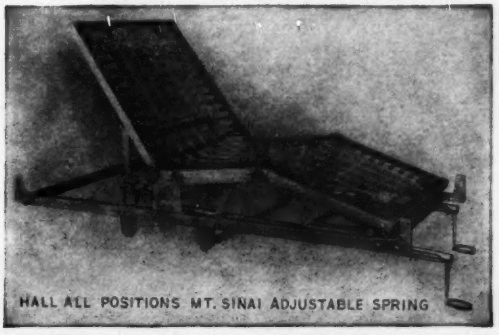
HARDWARE, BUILDERS
Corbin Lock Co. of Canada, Ltd., Belleville, Ont.
Dudley Lock, Div. United Carr Fastener Co. of Canada, Ltd., Toronto.

HEATERS, HOT WATER
S. A. Armstrong, Limited, Toronto.
Canadian General Electric Co. Limited, Toronto.
Combustion Engineering Corp., Ltd., Montreal.

HALL HOSPITAL BED EQUIPMENT

Because of the unusual service demanded of them, hospital beds require special designing and construction. HALL's complete line of such equipment includes Hospital Beds, Special Purpose Beds, Adjustable Springs, Safety Sides, etc.

Heavy tubing is used in Hall-constructed beds to insure strongly-welded joints for built-in strength. The famous Hall three-point Corner Lock insures lasting comfort, easy handling, economy and absolute safety. These are some of the reasons why Hall equipment is featured in many of the world's most famous hospitals.



HALL ALL POSITIONS MT. SINAI ADJUSTABLE SPRING

The All-Positions Spring is specially designed to keep bedding in place.

Strongly-built, efficient, easy to manipulate, comfortable for the patient—from every standpoint, the Hall All-Positions Adjustable Spring will give years of satisfactory hospital service.

Hall Hospital Bed Equipment is available in Canada through TIMCO. For further information, phone, wire or write to:

The MICHAEL TIMCO Company Limited

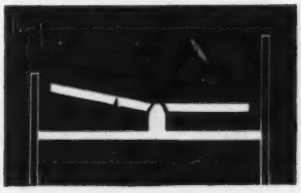
221 KENILWORTH AVE. NORTH, HAMILTON, ONT.

PHONE 5-9252

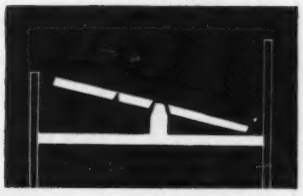
★TIMCO★

THE NEW HALL ALL-POSITIONS HEAVY DUTY ADJUSTABLE SPRING

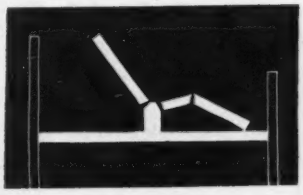
Hyperextension



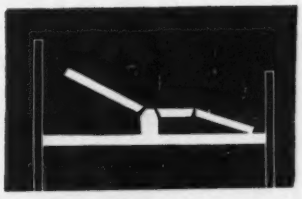
Vascular



Trendelenburg



Chair



Low Cardiac

Crane Limited, Montreal.
Northern Electric Co., Ltd., Montreal.
Superior Electrics Ltd., Pembroke, Ont.

HEATING EQUIPMENT
S. A. Armstrong, Limited, Toronto.
Canadian Fairbanks-Morse Co., Ltd., Montreal.
Combustion Engineering Corp., Ltd., Montreal.
Crane Limited, Montreal.
Northern Electric Co., Ltd., Montreal.

HOSE, RUBBER
Dunlop Tire & Rubber Goods Co. Ltd., Toronto.
Goodyear Tire & Rubber Co. of Canada Ltd., New Toronto, Ont.

HOSPITAL PLUMBING SPECIALTIES
Crane Limited, Montreal.

HOSPITAL RECORD FORMS
Standardized
Physicians' Record Co., Chicago, Ill.

HOT PLATES, ELECTRIC
Moffats, Limited, Weston, Ont.
Superior Electrics, Ltd., Pembroke, Ont.

HOUSEHOLD SOAP, BARS
Colgate-Palmolive-Peet Co., Ltd., Toronto.

HUMIDIFIERS, NASAL
O. E. M. Corpn., East Norwalk, Conn.

HYDRO-THERAPY PLUMBING EQUIPMENT
Crane Limited, Montreal.

HYPODERMIC NEEDLES
Allen & Hanburys Co. Ltd., Toronto 15.
Becton, Dickinson & Co., Rutherford, N.J.
Clay-Adams Co., Inc., New York, N.Y.
J. F. Hartz Co. Ltd., Toronto
Ingram & Bell, Ltd., Toronto.
International Instrument Sales, Montreal.
Propper Mfg. Co., Inc., Long Island City, N.Y.

ICE CREAM CUPS
Dixie Cup Co. (Canada) Ltd., Brampton, Ont.
Lily Cups, Limited, Toronto.

ICE CREAM MIX
"Junket" Brand Foods, Toronto.
J. H. Stafford Industries Ltd., Toronto.

ICE CREAM STORAGE CABINETS
Frigidaire Products of Canada Ltd., Leaside, Ont.

ICE MAKING EQUIPMENT
Canadian Ice Machine Co., Ltd., Toronto.
Universal Cooler Co. Ltd., Brantford, Ont.

IDENTIFICATION METHODS
Beads
Propper Mfg. Co., Inc., Long Island City, N.Y.
Linen, etc.
Applegate Chemical Co., Chicago, Ill.
Palmprint Outfits
Physicians' Record Co., Chicago, Ill.
Woven Names
Bland & Co., Ltd., Montreal.
J. & J. Cash, Inc., Belleville, Ont.

INCUBATORS, BABY
J. F. Hartz Co., Limited, Toronto.
Ingram & Bell, Limited, Toronto.
The Stevens Companies, Toronto.
Wilmot Castle Co., Rochester, N.Y.

INCUBATORS, BACTERIOLOGICAL
J. F. Hartz Co., Ltd., Toronto.
Ingram & Bell, Limited, Toronto.
Scanlan-Morris Co., Madison, Wis.
The Stevens Companies, Toronto.
Wilmot Castle Co., Rochester, N.Y.

INDELIBLE INKS
Applegate Chemical Co., Chicago, Ill.
McKague Chemical Co., Limited, Toronto.

INFANT FOODS
Canada Starch Co., Ltd., Montreal.
Cow & Gate (Canada) Ltd., Gananoque, Ont.
H. J. Heinz Co. of Canada, Ltd., Toronto.

THE BUYERS DIRECTORY

"Junket" Brand Foods, Toronto.
John Wyeth & Brother (Canada), Ltd., Windsor.

INKS, INDELIBLE MARKING
Applegate Chemical Co., Chicago, Ill.
Dye & Chemical Co. of Canada, Ltd., Kingston, Ont.

INSECTICIDES
British & Colonial Trading Co., Ltd., Toronto.
Canadian Industries Ltd., Montreal.
Dustbane Products, Ltd., Ottawa.
Thomas Gibson & Co., Ltd., Toronto.
Huntington Laboratories of Canada, Ltd., Toronto.
McKague Chemical Co., Limited, Toronto.
West Disinfecting Co., Ltd., Montreal.
G. H. Wood & Co., Ltd., Toronto.

INSTRUMENTS
Surgical and Diagnostic
Allen & Hanburys Co. Ltd., Toronto 15.
American Cystoscope Makers, Inc., New York.
Bard-Parker Co., Inc., Danbury, Conn.
Becton, Dickinson & Co., Rutherford, N.J.
Casgrain & Charbonneau, Ltée., Montreal.
Clay-Adams Co., Inc., New York.
Fisher & Burpe, Limited, Winnipeg. Man.
Gilbert Surgical Supply Co., Toronto.
J. F. Hartz Co., Ltd., Toronto.
Ingram & Bell, Ltd., Toronto.
International Instrument Sales, Montreal.
The Stevens Companies, Toronto.

INSULATED CONTAINERS
Thermos Bottle Co., Limited, Toronto.

INSULATING MATERIALS
Alexander Murray & Co., Ltd., Montreal.

INTERCOMMUNICATING SYSTEMS
Edwards of Canada, Ltd., Montreal.
Electro-Vox, Inc., Montreal.
Executone Communication Systems Ltd., Toronto.
Northern Electric Co., Ltd., Montreal.
X-Ray & Radium Industries, Ltd., Toronto.

INTRAVENOUS ADMINISTRATION APPARATUS
Baxter Laboratories of Canada, Ltd., Acton, Ont.
Cutter Laboratories, International, Toronto.
Ingram & Bell, Ltd., Toronto.
Macalaster, Bicknell Co., Cambridge, Mass.
The Stevens Companies, Toronto.

INTRAVENOUS PREPARATION EQUIPMENT
Cutter Laboratories, International, Toronto.
Ingram & Bell, Ltd., Toronto.
Macalaster, Bicknell Co., Cambridge, Mass.
The Stevens Companies, Toronto.

INTRAVENOUS SOLUTIONS
Abbott Laboratories Ltd., Montreal.
Baxter Laboratories of Canada, Ltd., Acton, Ont.
Cutter Laboratories, International, Toronto.
J. F. Hartz Co., Ltd., Toronto.
Ingram & Bell, Ltd., Toronto.
Pfizer Canada Ltd., Montreal.
John Wyeth & Brother (Canada), Ltd., Windsor.

INTRAVENOUS SOLUTIONS—DEXTRAN
General Laboratories, Limited, Toronto.

IRONS, ELECTRIC AUTOMATIC
Canadian Marconi Co., Montreal.

IRRADIATED PLASMA
Cutter Laboratories, International, Toronto.

JELLY POWDERS
Foodcraft Laboratories, Ltd., Toronto.
Gibbons Quickset Desserts, Toronto.
S. Gumpert Co. of Canada, Ltd., Toronto.

JUNIOR FOODS
H. J. Heinz Co. of Canada, Ltd., Leamington, Ont.

KETTLES, STEAM-JACKETTED
Aluminum Goods Limited, Toronto.
General Steel Wares, Ltd., Toronto.
Kitchen Installations, Ltd., Ajax, Ont.
Neptune Meters, Ltd., Long Branch, Ont.

S. H. Newman Co. Ltd., Toronto.
Robert Simpson Co. Ltd., Toronto.
Wrought Iron Range Co., Ltd., Toronto.

KNIVES
Detachable Blades
Bard-Parker Co., Inc., Danbury, Conn.
Clay-Adams Co., Inc., New York, N.Y.
Crescent Surgical Sales Co., Inc., New York, N.Y.

KNIVES, TABLE
Bell, Rinfret & Co., Ltd., Montreal.
Interstate Sales Agency, Galt, Ont.
McGlashan, Clarke Co., Ltd., Niagara Falls, Ont.

LABELS WOVEN
J. & J. Cash, Inc., Belleville.

LABORATORY AUTOCLAVES
Ingram & Bell, Ltd., Toronto.
The Stevens Companies, Toronto.
Wilmot Castle Co., Rochester, N.Y.

LABORATORY CENTRIFUGES
Clay-Adams Co., Inc., New York, N.Y.
International Equipment Co., Boston, Mass.

LABORATORY EQUIPMENT AND SUPPLIES
Becton, Dickinson & Co., Rutherford, N.J.
Canadian Laboratory Supplies, Ltd., Toronto.
Casgrain & Charbonneau, Ltée., Montreal.
Clay-Adams Co., Inc., New York.

LABORATORY FURNITURE
Canadian Laboratory Supplies, Ltd., Toronto.

LAMPS
Ultra Violet, Infra-Red
Burdick Corporation, Milton, Wis.
General Electric X-Ray Corporation, Ltd., Montreal.
Hanovia Chemical & Mfg. Co., Newark, N.J.

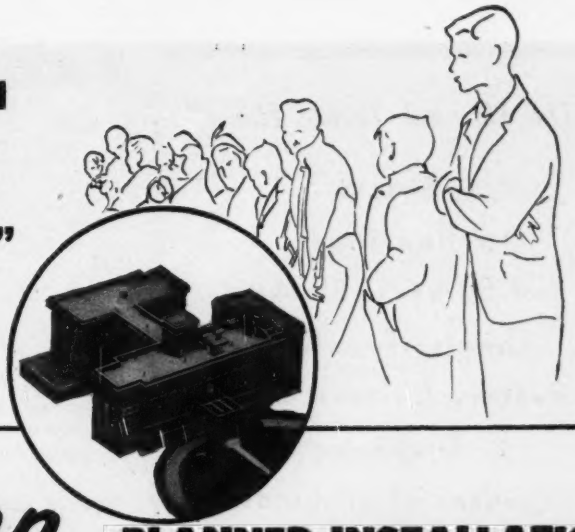
LATEX FOAM CUSHIONING
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
Goodyear Tire & Rubber Co. of Canada, Ltd., New Toronto, Ont.
Metal Craft Co., Limited, Grimsby, Ont.

LAUNDRY
Blanketing, Wool
Ayers Limited, Lachute Mills, Que.
G. A. Hardie & Co., Ltd., Toronto.

LAUNDRY ACCESSORIES
American Machine & Metals, Inc., East Moline, Ill.
Canadian Hoffman Machinery Co. Ltd., Toronto.
Canadian Laundry Machinery Co. Ltd., Toronto.
McGuire Industries Ltd., Newmarket, Ont.
McKague Chemical Co., Ltd., Toronto.
Equipment, All Kinds, Washers, Extractors, Tumblers, Ironers
Troy Laundry Machinery, East Moline, Ill.
American Machine & Metals, Inc., East Moline, Ill.
Canadian Hoffman Machinery Co. Ltd., Toronto.
Canadian Laundry Machinery Co. Ltd., Toronto.
McGuire Industries Ltd., Newmarket, Ont.
McKague Chemical Co., Ltd., Toronto.
Stanley Brock, Limited, Winnipeg.
Troy Laundry Machinery, East Moline, Ill.
Felt, Wool
Ayers Limited, Lachute Mills, Que.
G. A. Hardie & Co., Ltd., Toronto.
Flatwork Ironers
American Machine & Metals, Inc., East Moline, Ill.
Canadian Hoffman Machinery Co. Ltd., Toronto.
Canadian Laundry Machinery Co., Ltd., Toronto.
McKague Chemical Co. Ltd., Toronto.
Stanley Brock, Limited, Winnipeg.
Troy Laundry Machinery, East Moline, Ill.
Mechanical Clothing
Angelica Uniform Co. of Canada, Ltd., Montreal.
Ayers Limited, Lachhute Mills, Que.
Pressing Irons
Superior Electrics, Ltd., Pembroke, Ont.

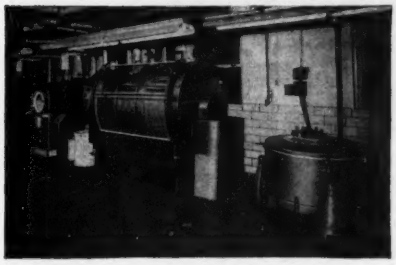
MODERNIZATION

eased the Laundry "Growing Pains" for Children's Hospital Columbus, Ohio



Hoffman -PLANNED INSTALLATION

MATCHES LINEN SUPPLY TO DEMAND



At far left, two new end-loading "Shell-Less" washers to supplement a previously installed 44 x 54 "Shell-Less", which was elevated for faster unloading. At right, a new 40-inch open-top extractor.

Bottleneck in finishing linen was broken by the addition of a 4-roll, 110-inch Hoffman flatwork ironer, a 42 x 60 "Balanced Suction" tumbler and (not shown) a 36 x 30 "Ucon" Tumbler.

A heavy schedule of overtime work, week after week — repeated need for sending laundry to outside processors — these were the "prices" paid by the 200-bed Children's Hospital for increasing service to its community. "What should be done about our laundry operation?"

A Hoffman laundry survey confirmed the fact that occupancy close to 100% (through the admission of adult polio cases) and work from a new nurses' home had established a basic laundry load greater than the existing equipment could handle or stay "caught up" with.

At the request of the Hospital's officials, two sets of plans for modernized laundries were prepared by Hoffman laundry engineers. One, for a new laundry in the existing floor space; the other, for an enlarged laundry in a building extension. Either arrangement provided a laundry operation matched to the needs. However, recalling the painful experiences of their soon-too-small, old laundry, Children's Hospital decided on the building addition. Installation of Hoffman laundry equipment has resulted in a reduction in the laundry work week and linen supply balanced to today's needs — capable of expansion to tomorrow's growth.

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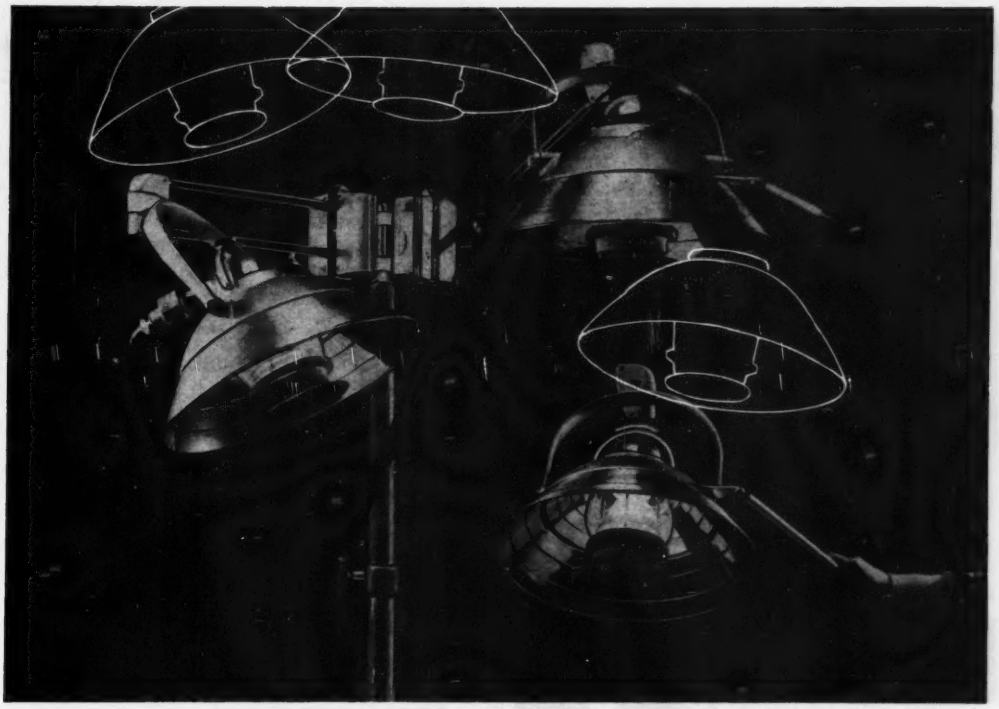

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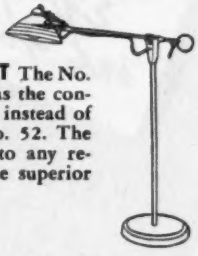

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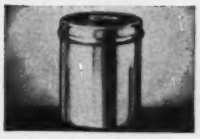

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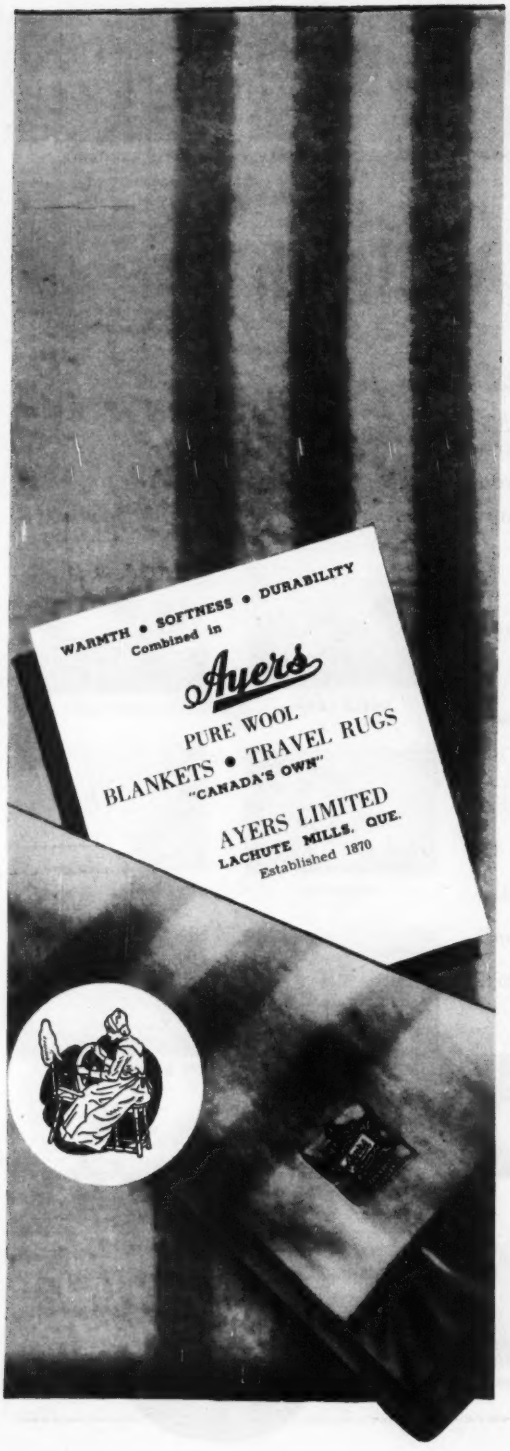

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General Steel Wares, Ltd., Toronto.
S. H. Newman Co. Ltd., Toronto.
Vollrath Company, Sheboygan, Wis.
Neptune Meters Ltd., Long Branch, Ont.
Wrought Iron Range Co., Ltd., Toronto.

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Canadian Hoffman Machinery Co. Ltd., Toronto.
T. Eaton Co., Limited, Toronto.
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VALVES
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Crane, Limited, Montreal.

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Canadian Laundry Machinery Co., Ltd., Toronto.
Stanley Brock, Limited, Winnipeg.

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VISIBLE RECORDS SYSTEMS
McBee Co. Limited, Toronto.

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Cutter Laboratories, International, Toronto.
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Parke, Davis & Co., Ltd., Walkerville, Ont.
E. R. Squibb & Sons of Canada Ltd., Toronto.
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Paul Collet & Co., Ltd., Montreal.

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Finlayson & Haire, Toronto.
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Thomas Gibson & Co., Limited, Toronto.
McKague Chemical Co., Limited, Toronto.
Stanley Brock, Limited, Winnipeg.
West Disinfecting Co., Toronto.

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Finlayson & Haire, Toronto.

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WATER SOFTENERS
Colgate-Palmolive-Peet Co., Ltd., Toronto.
McKague Chemical Co. Ltd., Toronto.

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Philips Industries, Ltd., Montreal.
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(For Subscription Rates See Page 97)

Authorized as Second Class Mail, Post Office Department, Ottawa. The Canadian Hospital is published monthly by The Canadian Hospital Council, 57 Bloor Street West, Toronto 5.

Nursing Aides' Uniforms

. . . of smart and practical design

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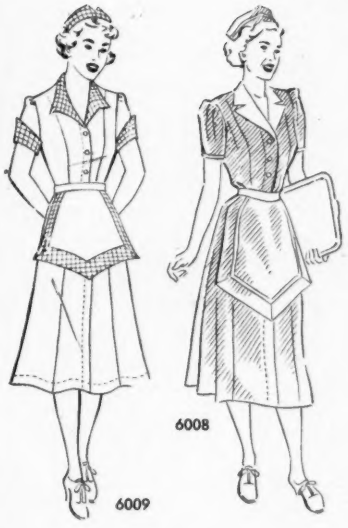

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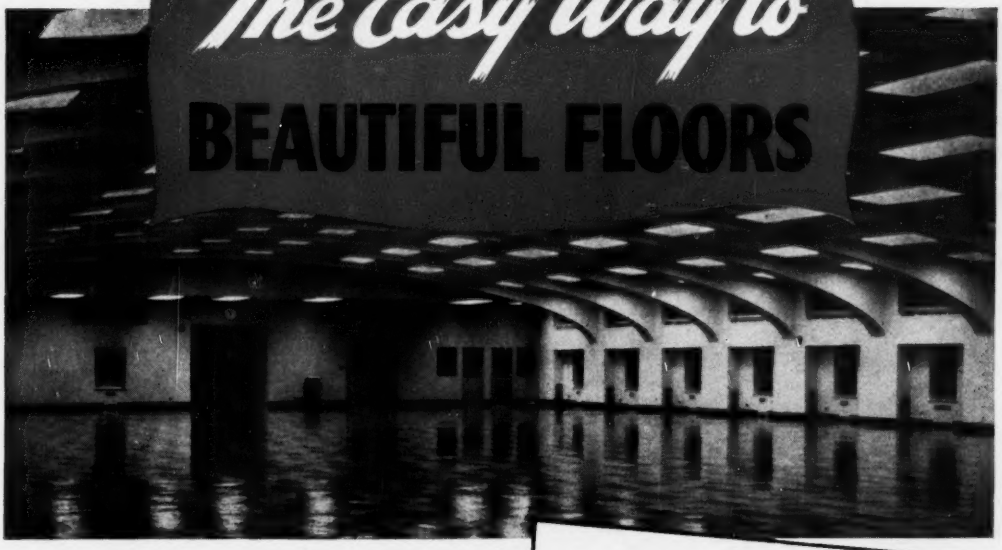

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